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MEASUREMENT OF THE CRITICALITY OF COMBAT TASKS

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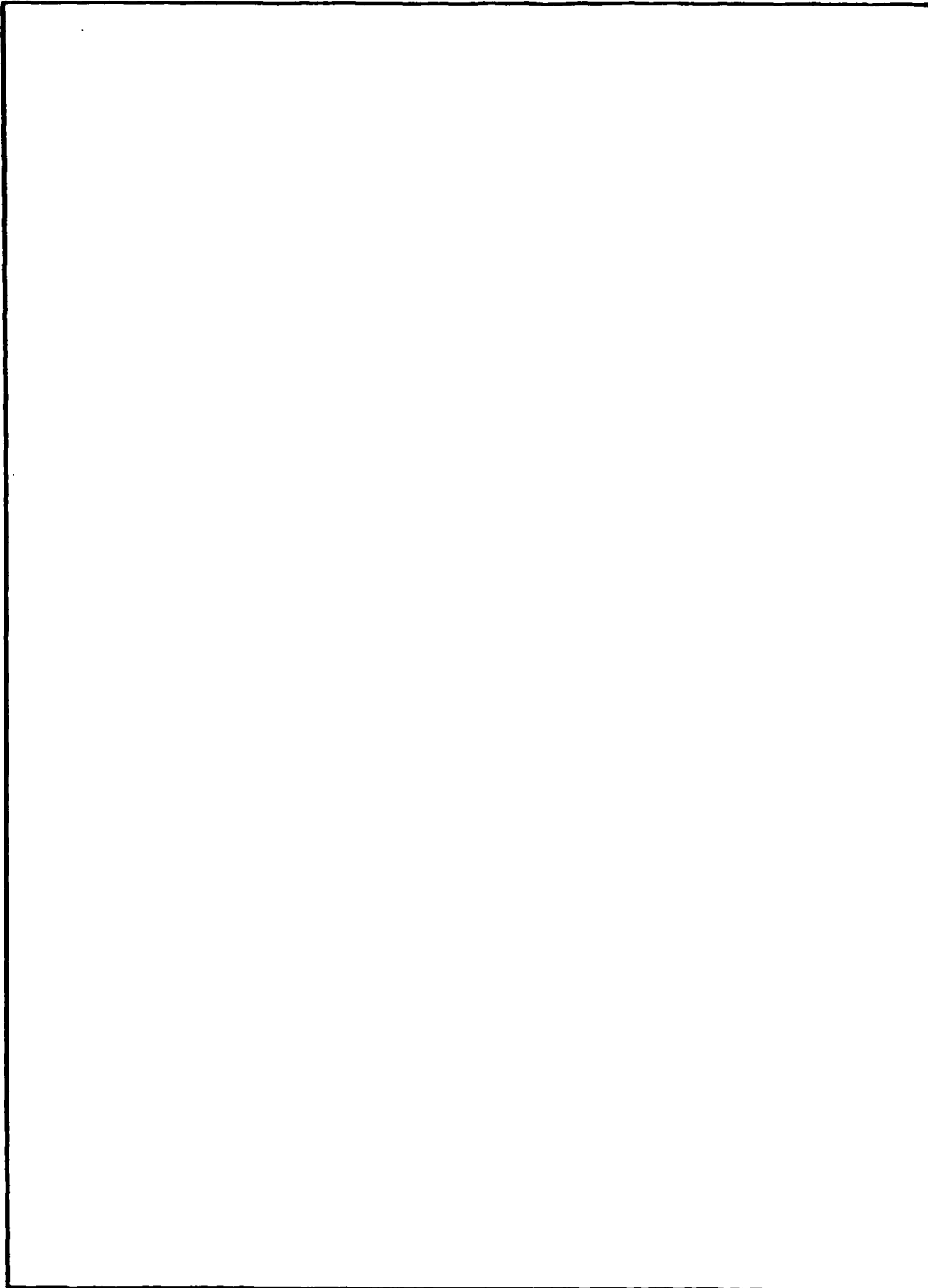
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report describes the development of a method for selecting combat tasks for training based on their criticality in determining the successful accomplishment of the unit mission in which they are performed. Comparisons are made between this method for assessing task criticality and the approach recommended in the Instructional Systems Development (ISD) model.										

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FOREWORD

The Fort Knox Field Unit performs research and development in combat arms tactical training. An important part of this research has been concerned with procedures involved in training development.

This report describes the development of a procedure for measuring the criticality of tasks performed during combat. The procedure requires experts to rate the effects of task performance on the successful accomplishment of the unit mission. The report also describes research on the importance of providing raters with information pertaining to the mission and the combat situation.

This report should be of interest for training developers who must select combat tasks for training. Although the present research was performed using tank platoon leader tasks, the results should have generality outside of this task domain.

MEASUREMENT OF THE CRITICALITY OF COMBAT TASKS

EXECUTIVE SUMMARY

Requirement:

To develop a methodology for measuring the criticality of combat tasks based on ratings of their effects on the successful accomplishment of the unit mission; to determine the importance of providing descriptions of the missions and the contexts in which the tasks are performed when measuring their criticality.

Procedure:

Two questionnaires were administered to separate samples of Army officers. One questionnaire contained scenarios describing four different armor missions and the tasks that were performed by the platoon leader during these missions. Respondents read each scenario and judged the degree to which the performance of each task would affect the successful accomplishment of the unit mission. They also judged the degree to which the performance of these tasks would affect factors normally associated with combat effectiveness (e.g., firepower, survivability). The second questionnaire contained alphabetical lists of platoon leader tasks, but did not describe the missions nor the contexts in which they were performed. Respondents judged the degree to which the performance of each task would affect the successful accomplishment of the unit mission. Judgments were also obtained on the factors recommended by ISD for selecting tasks for training.

Findings:

Ratings of mission success were found to be highly reliable. The effects of contexts on these ratings were found to vary with the tasks being rated and with the particular contexts. The construct validity of mission success ratings as measures of task criticality was supported by the finding that the combat effectiveness factors were more predictive of mission success ratings than were the ISD criteria.

Utilization:

The method for measuring task criticality described in this report uses direct judgments of the effects of task performance on mission accomplishment. This method can be used by training developers to select tasks for training based on their effects on the successful accomplishment of the mission in which they are performed.

MEASUREMENT OF THE CRITICALITY OF COMBAT TASKS

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MEASUREMENT OF THE CRITICALITY OF COMBAT TASKS

INTRODUCTION

One of the major problems experienced by training developers is the lack of sufficient time and resources to train all of the tasks that are performed by soldiers in a particular duty position. There are several ways in which this problem can be handled. One is to lower the performance standards so that more tasks can be taught in the same amount of time or within existing resources. While this approach will help to assure that the maximum number of tasks will be taught, there would be a risk that the soldiers would not be able to perform the tasks well enough to allow their units to function effectively. This would be an especially serious problem during combat since it can lead to the failure to achieve mission success. Another way to handle the problem is to conduct training during hours not normally devoted to training such as evening hours or weekends. This approach is also unsatisfactory since it can lead to excessive fatigue and can cause morale problems. In addition, it can prevent the success of accelerated training during a military emergency. A third approach, and one that is recommended by the U.S. Army Training and Doctrine Command (TRADOC) in TRADOC Pamphlet 350-30, Interservice Procedures for Instructional Development, is to train only those tasks that can be handled within the available time and resource constraints, but to include those tasks that are most critical to mission success. Although this approach would prevent soldiers from learning all of the tasks performed in an MOS, careful selection of tasks could keep the impact on unit performance to a minimum. Ideally, tasks that are not learned during institutional training could be learned later during unit training or learned informally while on the job.

Current Procedures for Assessing Task Criticality

Guidance on the selection of critical tasks for training is contained in TRADOC Pamphlet 350-30 and in TRADOC Circular 351-4, Job and Task Analysis. The selection process described in the latter document specifies that an inventory should be prepared listing the tasks performed by soldiers in a particular duty position. The tasks contained in this list are to be classified as either critical or non-critical using the results of a survey of job incumbents and job experts. The purpose of the survey is to provide information on how the tasks rate on factors considered to be indicative of task criticality. Each proponent school is to assign weights to these factors according to their priority of importance within that school. The weighted scores are to be used to classify the tasks as either critical or non-critical. A task selection board is then to review the results of the task classification and either approve them or make whatever modifications it deems necessary. The final list is then sent to the Commandant for approval.

Eight survey criteria that can be used to classify tasks as critical or non-critical are suggested in TRADOC Pamphlet 350-30, although the

document states that other criteria can be added or substituted. The eight recommended criteria are (1) the percentage of job incumbents who perform the task, (2) the percentage of time spent performing a task, (3) the probable consequences of inadequate task performance, (4) the delay that can be tolerated between the time the need for task performance becomes evident and the time actual performance must begin, (5) the frequency of task performance, (6) the difficulty involved in learning the task, (7) the probability of deficient task performance, and (8) the time between job entry and task performance. The guidelines for applying these criteria specify that ratings should be obtained from job incumbents, supervisors, or other individuals who are familiar with the job to be trained. After the ratings are obtained, and once it is determined how many tasks can be trained, the ratings can be used to classify tasks as critical or non-critical prior to their final administrative review.

Additional guidance for selecting tasks for training is contained in TRADOC Circular 351-4, Job and Task Analysis. The purpose of this document is to supplement TRADOC Pamphlet 350-30 with later TRADOC policy and to modify its contents so that they will correspond to the current philosophy in the TRADOC training system. The process of selecting critical tasks is described in the circular as one of the most, if not the most, important requirement in the training development area of responsibility. Four criteria are suggested for selecting critical tasks (in contrast to the eight that were suggested earlier). These criteria are (1) probability of emergency performance, (2) task learning difficulty, (3) probability/consequences of inadequate performance, and (4) percent of soldiers in the MOS performing the task. One criterion, probability of emergency performance, corresponds to the earlier criterion pertaining to the delay that can be tolerated between the time the need for task performance becomes evident and the time actual performance must begin. The other three recommended criteria also parallel criteria recommended earlier. However, four criteria appearing in the earlier document are absent in the new document-- (1) the percentage of time spent performing a task, (2) the frequency of task performance, (3) the probability of deficient task performance, and (4) the time between job entry and task performance.

The eight criteria that are recommended in TRADOC Pamphlet 350-30 and the four criteria that are recommended in TRADOC Circular 351-4 are intended to be used to identify critical tasks. A critical task is defined in TRADOC Reg 350-7, A Systems Approach to Training, as one that is essential to the accomplishment of a mission. In other words, it is a task which if properly performed increases the probability that a unit will be successful in accomplishing its mission. Conversely, it is a task which if not properly performed decreases the probability that a unit will be successful in accomplishing its mission.

¹Subsequent to the initiation of this project, the U.S. Army Training Board developed new guidance for measuring the criticality of collective tasks. Each task is to be rated on two five point scales: (1) how essential the task is to mission success and (2) how essential the task is to survival. These scales are described in Collective Training Workshop (U.S. Army Training Board, 1983).

Weaknesses of Current Procedures for Assessing Task Criticality

Although task criticality is clearly defined by TRADOC in terms of the effects of task performance on the successful accomplishment of a unit's mission, this factor is not among the criteria recommended by ISD for assessing task criticality. Tasks that must be performed quickly do not necessarily have a greater impact on mission performance than tasks that do not have to be performed quickly. This is not meant to imply that tasks that must be performed immediately do not affect performance. They obviously do, but so do many tasks that do not have to be performed quickly. Planning a mission, for example, may take place over a long period of time, but the quality of its performance can have a major impact on the success of a mission. Similarly, tasks that are hard to learn do not necessarily have a greater impact on performance than tasks that are easy to learn. And tasks that are performed by many soldiers in an MOS do not necessarily have a greater impact on performance than tasks that are performed by relatively few soldiers. The criterion that seems to have the closest relationship to performance among the four recommended by TRADOC is the probability/consequences of inadequate performance. If the consequences of task performance affect the performance of a mission, and if these consequences are likely to occur, then the task must be critical. Since the description of this criterion in TRADOC Circular 351-4 states that it pertains to the loss of life or limb, or to damage or destruction of equipment, this factor does seem to correspond, at least indirectly, to the concept of criticality. Regardless of whether these criteria correspond to the concept of task criticality as it is described by TRADOC, they are all indirect ways of assessing the criticality of a task. That is, none of the criteria pertain directly to the effects of task performance on the successful accomplishment of a unit's mission. A preferable way to measure task criticality would be to determine directly how the performance of a task affects such performance. This would eliminate the need to infer how performance would be affected by the intermediate characteristics actually being measured. The most direct way to determine the effects of task performance, of course, would be to observe how the performance of the task affects actual performance. But making these observations would be difficult, especially during combat, and determining the ultimate consequences stemming from the performance of any one task would probably be impossible. Moreover, it would be difficult or impossible to make enough observations of each task and its consequences to make reliable estimates of the task's criticality.

As an alternative to observing combat, a battle simulation could be used to estimate the consequences of task performance. This method would allow the performance of a task to be repeated, albeit in simulated form, so that several estimates of consequences could be obtained. However, the use of battle simulation requires sufficient input regarding consequences of task performance so that the ultimate effect on the combat mission can be deduced. Unfortunately, programs are not yet sufficiently refined to enable the effects of individual tasks on mission outcome to be determined.

Assessing Task Criticality Using Ratings of Mission Success

If it is neither possible to observe combat directly nor to use battle simulation to determine the effects of task performance on the accomplishment of the unit mission, an alternative technique for directly assessing these effects is through the use of ratings. Unlike the ISD method for assessing task criticality, raters would not be asked to rate the criticality of a task indirectly by describing its learning difficulty or the percentage of soldiers who perform the task. Instead, they would be asked to directly rate the degree to which the performance of the task affects the successful accomplishment of the unit mission. Since this type of rating scale would correspond to the definition of task criticality presented by TRADOC, its use could circumvent the problems created by trying to infer task criticality indirectly rather than directly. When a rater is given the title of a task and asked to rate its effects on the accomplishment of the unit mission, it is likely that the rater will have to take into account the context in which the task is performed. A task whose performance may have a large effect on the outcome of a mission in one situation may have a very small effect on the outcome of the mission in another situation. For example, if a leader neglects to post a guard, the consequence of this behavior would depend upon whether or not there would have been anything important to detect had the guard been posted. The rater who must rate the effects of the task on mission accomplishment would need to know more about the context in which the task was performed in order to make a judgment of its criticality.

The Importance of the Combat Situation in Determining Task Criticality

Since the ISD model for assessing task criticality requires raters to rate tasks on factors such as learning difficulty and time to perform rather than on their effects on mission accomplishment, the lack of a context in ISD should make little difference. The difficulty of learning a task will remain the same regardless of the context in which the task is later performed. Similarly, the time available to a soldier before that soldier must perform the task is probably less affected by the context than are the effects of the task on the accomplishment of the mission. While the consequences of inadequate performance do appear to depend upon the context in which the task is performed, the ISD model does not specify that a context be used when obtaining ratings of this criterion.

The respondent who is asked to rate the criticality of a task, but who is provided no context explaining when the task was performed, is presented with a dilemma. There are several different strategies that the rater may use. One strategy would be to rate the task in the context in which it would be most critical. Another strategy would be to rate the task in its most likely context. Another is to try to estimate its average criticality across all of the contexts in which it is likely to be performed. Still another approach would be to try to estimate its criticality on an abstract basis without attempting to place it in any particular context. If different raters use different strategies or if the same rater uses different

strategies for different tasks, then the ratings are likely to be unreliable even if all of the raters were capable of judging the criticality of each task in each circumstance in which it was conducted. To avoid differences in criticality ratings due to the strategy adopted by the rater, it is important to prevent the adoption of these different strategies. An appropriate way in which to accomplish this could be to provide the context to the rater and require that the effects of the performance of the task be described only for the particular context which was provided.

If the context in which the task is performed affects its criticality, then it is obviously important how the context is chosen for surveys of task criticality. To attempt to include all or even most contexts in which a task is performed would be time consuming and wasteful. However, it should be possible to specify a criterion for which training is most important. For example, battle simulations can be used to identify contexts in which the performance of a unit has the greatest impact on the outcome of a major engagement. Once these contexts are identified, they can be used to prepare contexts in which the performance of individual tasks can be assessed in terms of their overall effects on the accomplishment of the unit mission. To seek a solution to this problem at the present time is premature, however. First it is necessary to determine whether direct judgments of the effects of task performance on mission accomplishment can be reliably obtained and if such judgments are affected by the descriptions of the contexts in which the tasks are performed.

PURPOSE

The purpose of this study was to examine the use of a Mission Success scale as a more direct means of assessing task criticality and to determine the importance of describing the mission and its context when obtaining direct ratings of mission success. In particular, the following issues were examined:

1. Are ratings of mission success sufficiently reliable to be used to assess task criticality? How does the reliability of this scale compare to the reliability of the scales recommended by TRADOC for assessing task criticality?
2. What tasks are described as having the largest effects on mission success? Are the most critical tasks identified using the mission success scale the same as those identified using the scales recommended by TRADOC?
3. What effects does the use of a context have on judgments of task criticality using the Mission Success scale? Is a task equally critical when contained in different contexts?
4. When using the Mission Success scale to assess task criticality, will the use of a context affect the tasks that are selected for training?

5. Is the Mission Success scale a valid measure of task criticality? What is the relationship of mission success ratings to ratings on factors generally accepted as related to mission success? How does it relate to the scales recommended by TRADOC as part of the ISD model?

METHOD

Two questionnaires were prepared to assess the criticality of a sample of tactical leadership tasks performed by tank platoon leaders. Both questionnaires contained mission success scales on which respondents could rate the effects of task performance on the successful accomplishment of the mission. The questionnaires differed, however, in three ways: (1) whether or not scenarios were provided which described the contexts in which the tasks were performed, (2) the number of tasks that were to be rated, and (3) the remaining scales that were contained in the questionnaires. One of the questionnaires, which will be referred to as the mission-based questionnaire since each task was imbedded in a specific mission, contained four different scenarios and a total of 66 tasks (including some that were duplications). It also contained five additional scales that measured factors that are normally associated with combat effectiveness (i.e., firepower, communication and control, mobility, survivability, and sustainability). The other questionnaire, which will be referred to as the ISD-based questionnaire since it was based on the ISD guidelines, contained no scenarios, but did contain 161 platoon leader tasks (including the 66 that were contained in the mission-based questionnaire) and four scales. Three of the scales measured factors that were recommended in TRADOC Circular 351-4. The fourth scale was the Mission Success scale.

Materials

Mission-Based Questionnaire

The mission-based questionnaire contained four scenarios each depicting a different mission. Each scenario contained two parts--a description of the general situation and a description of the special situation. The general situation described the company mission, the enemy situation, the terrain and weather, and the units that were involved in the mission directly or were supporting it. The special situation described the role of the platoon leader during the mission. A sketch was provided depicting the special situation for the platoon. A total of 51 different platoon leader tasks were embedded within the four scenarios. The procedure and materials used to select these tasks are described in Appendix A. Since several tasks appeared in more than one scenario, or more than once within the same scenario, respondents were required to make 66 sets of judgments among the 51 tasks.

Each scenario was followed by six sets of rating scales. Listed alongside each set of scales were the platoon leader tasks that were depicted within the scenario. The first five sets of rating scales, the

combat effectiveness scales, corresponded to the five factors normally associated with mission success. They pertained to the effects of task performance on (1) effective application of fire power, (2) effective use of mobility and maneuver, (3) effective command, control, communication, and coordination, (4) survivability of men and equipment, and (5) sustainment of combat effectiveness. The sixth set of scales pertained to mission success. The scales were presented in the same order for all four scenarios. However, the order in which the four scenarios were presented was counterbalanced so that each scenario appeared in each of the four positions an equal number of times.

Five-point scales were used on which respondents indicated the effect of task performance on each factor. The response alternatives for the mission-based questionnaire were: none, small, moderate, large and extreme. The instructions required the respondents to consider both the decision and action components of each task when making their judgments. A copy of the mission-based questionnaire is contained in Appendix B.

ISD-Based Questionnaire

The ISD-based questionnaire contained 161 platoon leader tasks presented in alphabetical order. The procedure used to select these tasks is described in Appendix A. The contexts in which the tasks were performed were not described. Four scales were included in the questionnaire. Three of the scales corresponded to ISD criteria for selecting critical tasks contained in TRADOC Circular 351-4. The first criterion described in the circular is Probability of Emergency Performance/Task Delay Tolerance. This is defined as the amount of delay acceptable in performing a task. The scale corresponding to this criterion required respondents to rate the amount of time that the platoon leader would have available before starting the task. The response alternatives for this scale were: none, one minute or less, several minutes, several hours, and one day or more.

The second criterion described in the circular is Task Learning Difficulty. This is defined as the time required to achieve performance proficiency. The scale corresponding to this criterion required respondents to rate the time that would be required to learn the task by most new officers. The response alternatives for this scale were: none, one hour or less, several hours, one day, and two days or more.

The third criterion described in the circular is Probability/Consequences of Inadequate Performance. This is defined as the loss of life or limb or damage/destruction of equipment that would likely result from inadequate task performance. The scale corresponding to this criterion required respondents to rate the amount of equipment damage and/or injury to personnel that could result from the performance of the task by the platoon leader. The response alternatives for this scale were: none, small, moderate, large, and extreme.

A fourth criterion described in TRADOC Circular 351-4, Percent Performing, was not included in the questionnaire. This information is generally obtained from CODAP reports. Since only officially accepted

tasks are contained in these reports, the percentage of platoon leaders performing each task could not be obtained and was not taken into account.

The fourth scale contained in the ISD-based questionnaire was the Mission Success scale. The scale was identical to the Mission Success scale appearing in the mission-based questionnaire.

The 161 platoon leader tasks appeared in the questionnaire four separate times, once for each set of scales. Although the tasks always appeared in the same order, the scales were counterbalanced so that each scale appeared in each of the four positions an equal number of times. Since each tactical leadership task contained both a decision and an action component, respondents were asked to consider both when making their judgments. A copy of the ISD-based questionnaire is contained in Appendix C.

Subjects

The subjects for this research were two platoons of U.S. Army officers enrolled in the Armor Officer Advanced Course (AOAC) at the Armor School in Fort Knox. A total of 57 officers were assigned to one platoon, while 65 officers were assigned to the other. The assignment of officers to platoons was done non-systematically.

While descriptive data were not available for the particular group of officers who served as subjects, students in this course generally average four years of service as commissioned officers and have the grade of captain. Approximately three-fourths of the students are assigned to armor, while most of the remaining officers are assigned to infantry.

Procedure

Each of the two questionnaires was administered to a separate platoon of AOAC officers, but in different classrooms and at the same time. The mission-based questionnaire was administered to the platoon containing 57 officers, while the ISD-based questionnaire was administered to the platoon containing 67 officers. Since officers were assigned to platoons non-systematically, there are unlikely to be any differences between the two groups of subjects that could influence the ratings.

The order of the questionnaires within each set was systematically varied so that one-fourth of the respondents received each version. One and one-half hours were allocated to the administration of both questionnaires, but all respondents were finished in just over an hour.

RESULTS AND DISCUSSION

Scale Reliability

Results

Interrater reliability estimates for the two Mission Success scales, the three ISD-based scales, and the five combat effectiveness scales are presented in Table 1. These estimates were derived using the intraclass correlation method (Ebel, 1951) and represent the average intercorrelation between all pairs of raters across the tasks that were rated. Since an intraclass correlation gives the mean reliability for a single rater, the Spearman-Brown formula was used to estimate the interrater reliability of each scale with different numbers of raters. These values are also contained in Table 1 up to the size of the sample from which the data were obtained.

The estimated interrater reliability of the two Mission Success scales was extremely high although it was slightly higher for the scale contained in the ISD-based questionnaire (.94) than the one contained in the mission-based questionnaire (.89). The reliability estimates for the three ISD-based criticality scales were also high ranging from .93 for the Damage/Injury scale to .96 for the Time Available and Time to Learn scales. Similarly, the reliability estimates for the five combat effectiveness scales were high ranging from .86 for the Sustainability scale to .93 for the Mobility scale.

The standard error of measurement for each scale is also presented in Table 1. This statistic is an estimate of the standard deviation of the mean ratings that would be received for a task if different samples were to be drawn that were equal in size to the samples used in the present study. This value is a guide to the stability of the means that would be obtained with repeated criticality assessments. Since the standard errors of measurement for the Mission Success scales were identical (.09) regardless of the type of questionnaire in which they were embedded, the stability of the scale does not appear to be affected by the context in which it is contained. Overall, the standard error of measurement for the different scales tends to cluster around .10; this suggests that the means obtained from newly drawn samples of the same size would be within .10 of the means obtained in the present samples approximately two-thirds of the time. Thus, the mean rating obtained by a task on any of the scales is extremely stable and should not vary widely from sample to sample.

Discussion

It was anticipated that the reliability of the mission success scale would be higher in the mission-based questionnaire than in the ISD-based questionnaire. This expectation was based on the assumption that respondents would use different strategies when asked to rate the criticality of a task without being told the context in which the task is performed. That is, it was assumed that some raters would try to judge the average criticality of the task over the different contexts in which it could be

Table 1
Interrater Reliability Estimates for Rating Scales in
ISD-Based and Mission-Based Questionnaires

Number of Raters	ISD-Based Questionnaire Scales					Mission-Based Questionnaire Scales				
	Mission Success	Damage/ Injury	Time Avail- able	Time to Learn	Mission Success	Fire Power	Mobil- ity	Command	Surviva- bility	Sustain- ability
1	.21	.16	.27	.28	.13	.18	.20	.14	.15	.10
2	.34	.28	.43	.44	.23	.31	.34	.24	.26	.19
3	.44	.36	.53	.54	.38	.40	.43	.32	.35	.27
4	.51	.43	.60	.61	.38	.47	.50	.39	.41	.32
5	.57	.49	.65	.66	.43	.53	.56	.55	.47	.37
10	.72	.66	.79	.79	.55	.69	.72	.61	.64	.54
15	.80	.74	.85	.85	.67	.77	.79	.70	.73	.64
20	.84	.79	.88	.89	.75	.82	.83	.76	.78	.70
30	.89	.85	.92	.92	.82	.87	.88	.83	.84	.78
40	.91	.88	.94	.94	.86	.90	.91	.86	.88	.82
50	.93	.90	.95	.95	.88	.92	.93	.89	.90	.85
Total (N=)	.94 (63)	.93 (65)	.96 (63)	.96 (64)	.89 (55)	.92 (55)	.93 (55)	.90 (55)	.91 (55)	.86 (55)
Standard Error of Measure- ment	.09	.10	.08	.10	.09	.11	.11	.09	.11	.10

performed, that some raters would judge the criticality of the task in its most critical context, while others would judge it in the context in which it would most often be performed. It was also considered possible that some raters would attempt to judge the task abstractly without relating it to any particular battlefield context. On the other hand, it was assumed that the context presented by the scenarios in the mission-based questionnaire would cause the raters to judge the criticality of the task within the same context, thus achieving greater reliability.

The results of the research failed to confirm this expectation. The interrater reliability of the mission success scale was extremely high for both questionnaires. While the high reliability of the Mission Success scale in the mission-based questionnaire was anticipated, the high reliability of the scale in the ISD-based questionnaire was not. One possible reason for the high reliability of the mission success ratings made in the ISD-based questionnaire may have been that the assumption that different raters would use different strategies when judging task criticality was wrong. Since the respondents were not asked how they made their judgments, it was impossible to determine just how the judgments were made. It is possible, however, that the subjects tended to use the same strategies when making the judgments. Another possibility is that the respondents may not have used any strategy to make the judgments, but may have echoed the information that they had learned in class or that they reflected armor doctrine. If such were the case, then it would be possible that the raters may have used a similar approach in judging task criticality using the mission-based questionnaire. This probably did not happen, however, since the correlation between the two sets of mission success ratings was only .57. If the raters reflected armor doctrine when making the mission success ratings in both questionnaires, then the correlation between the two sets of ratings should have approached the reliabilities of the two sets of scales. The fact that the correlation between the two sets of ratings was .57 implies that 32% of the variance in the ratings were shared in common among the two scales, but that 68% of the variance of each scale was unique to that scale.

One difference between the two Mission Success scales was in the distribution of scores that was obtained from each questionnaire. While the ranges were similar (2.84-4.48 in the mission-based questionnaire and 2.69-4.55 in the ISD-based questionnaire), there were far more scores in the lower end of the distribution in the ISD-based questionnaire than in the mission-based questionnaire.¹ While 21 percent of the mission success scores in the ISD-based questionnaire were below 3.50, only 2 percent of the tasks had mean mission success ratings below 3.50 in the mission-based questionnaire. The difference in the dispersion of the scores obtained from the two questionnaires can also be examined by comparing the standard deviations of the ratings. The standard deviation of the ratings in the ISD-based questionnaire was .37, while the standard deviation of the ratings in the mission-based questionnaire was .28. An F-test comparing the variances showed that they differed significantly ($F=1.71$, $df=160$, 65; $p<.01$). This difference in the distribution of mission success scores from

¹See Appendixes F and G for distributions of mission success scores.

the two questionnaire types may also explain the difference in the reliability of the two sets of scores. The restricted distribution of the mission success scores in the mission-based questionnaire may have negated any positive effects on reliability due to the context in which the ratings were made.

Mean Ratings of Platoon Leader Tasks

Results

The means and standard deviations for the 161 platoon leader tasks rated using the ISD-based questionnaire are contained in Appendix D, while the means and standard deviations for the 51 platoon leader tasks rated using the mission-based questionnaire are contained in Appendix E. The tasks are identified in both Appendixes according to the number assigned to them in the ISD-based questionnaire. The data are presented in Appendix E by scenario. Within each scenario, the data are presented by mission phase. Since several tasks appeared in more than one scenario or in more than one phase within a scenario, these tasks will appear in the table more than once. Footnotes adjacent to an item number will designate when data for that task appear elsewhere.

ISD-Based Questionnaire. Appendix F contains the rankings of the 161 tasks on each of the four scales contained in the ISD-based questionnaire. The mean scores obtained on the Mission Success scale ranged from 2.69 to 4.55; only three tasks received mean ratings below 3.00. Thus, virtually all of the tasks were described as being at least moderately critical in terms of their effects on the successful accomplishment of the mission.

The five tasks that were rated as most critical and the five that were rated as least critical on each of the four scales are presented in Table 2. The tasks that were described as having the largest effect on the successful accomplishment of the mission all involved an aspect of planning (e.g., Issues OPORD, Chooses a Course of Action). These tasks were similar to those that were described as requiring the most time to learn. On the other hand, the tasks whose performance was described as resulting in the most damage to equipment and/or injury to personnel involved attacking the enemy (e.g., Directs Enemy be Engaged, Directs Fire and Maneuver by Conducted). Similar tasks were also described as being required in the shortest amount of time (e.g., Directs Open Fire, Directs Enemy be Engaged). Thus, the five most critical tasks appearing on the Mission Success scale and on the Time to Learn scale pertained to planning, while the five most critical tasks appearing on the Damage/Injury scale and on the Time Available scale pertained to engaging the enemy.

The five tasks that were described as having the smallest effect on the successful accomplishment of the mission involved platoon movement (e.g., Directs Coil Formation, Controls Interval Between Tanks). Similar tasks were among those whose performance was described as having the least effect on damage to equipment and/or injury to personnel although the least critical tasks on the Damage/Injury pertained to communications (i.e., Reports TOW Effects, Requests Wire Communications be Installed). The least

Table 2

Tasks Described as Most and Least Critical
on Scales Contained in the ISD-Based Questionnaire

Scale	Most Critical Task	Mean Rating	Least Critical Task	Mean Rating
Damage/Injury	Directs Enemy be Engaged	4.11	Reports TOW Effects	2.34
	Directs Enemy on Objective be Destroyed	4.03	Requests Wire Communications be Installed	2.45
	Develops the Situation	4.03	Directs Herringbone Formation	2.49
	Directs Fire and Maneuver be Conducted	4.02	Directs Coil Formation	2.50
	Directs Attack be Conducted	3.95	Directs Traveling	2.50
Time Available	Directs Surprise Targets be Engaged	1.72	Conducts Reconnaissance	3.67
	Directs Open Fire	1.73	Conducts Necessary Coordination	3.59
	Directs Cease Fire	1.86	Prepares an Operation Plan	3.57
	Directs Enemy be Engaged	1.91	Issues OPORD	3.42
	Directs Suppressive Fires be Shifted	1.92	Prepares a Fire Plan	3.41
Time to Learn	Prepares Operation Plan	4.27	Awaits Time or Permission to Open Fire	2.02
	Conducts Reconnaissance	4.26	Awaits Time or Permission to Attack	2.08
	Issues OPORD	4.23	Reports Crossing Phase Lines	2.08
	Analyzes OPORD	4.12	Directs Air Guards be Kept Alert	2.09
	Coordinates Indirect Fires	4.11	Direct Air Guards be Posted	2.11
Mission Success	Issues OPORD	4.55	Directs Coil Formation	2.69
	Issues FRAGO	4.52	Directs Coil or Herringbone Formation	2.74
	Chooses a Course of Action	4.49	Directs Herringbone Formation	2.78
	Makes an Estimate of the Situation	4.47	Controls Interval Between Tanks	3.00
	Analyzes OPORD	4.45	Controls Speed of Tanks	3.05

Note. High mean ratings indicate high criticality on the Damage/Injury, Time to Learn, and Mission Success Scales; low mean ratings indicate high criticality on the Time Available scale.

critical tasks identified on the Time Available scale pertained to planning (e.g., Conducts Reconnaissance, Prepares an Operation Plan). Thus, the least critical tasks on this scale were similar to the most critical tasks that were identified on the Mission Success and Time to Learn scales. The least critical tasks in terms of time to learn involved waiting for permission to open fire or attack, reporting the crossing of phase lines, and posting or alerting air guards.

In summary, the Time to Learn scale was the only one of the three ISD scales on which tasks that were reported to be most critical to mission success also appeared as most critical. Moreover, tasks pertaining to planning were reported to be least critical on the Time Available scale even though they were the types of tasks reported to be most critical in terms of mission success.

Mission-Based Questionnaire. Appendix G contains the rankings of the 51 tasks on each of the six scales contained in the mission-based questionnaire. There are a total of 66 rankings since a task was ranked each time it appeared in a scenario. The tasks are identified in Appendix G according to the numbers assigned to them in the ISD-based questionnaire. The mission and mission phase in which each task appeared are also identified. The mean scores obtained on the Mission Success scale ranged from 2.84 to 4.48. However, only one task (Requests Illumination) received a mean rating below 3.50. Thus, proportionately fewer tasks were rated as comparatively low in criticality in terms of mission success when using the mission-based questionnaire than when using the ISD-based questionnaire.

The five tasks that were rated as most critical on the Mission Success scale and the five tasks that were rated as making the greatest contribution to combat effectiveness on the five combat effectiveness scales are presented in Table 3. The five tasks that were rated as least critical and as contributing the least to combat effectiveness are also presented in Table 3. The tasks that were described as having the largest effect on the successful accomplishment of the mission involved attacking the enemy (e.g., Directs Fire and Maneuver be Conducted, Directs Enemy be Engaged). Although the five tasks that were described as most critical on the Mission Success scale in the ISD-based questionnaire pertained to planning, only one of these tasks (Issues FRAGO) also appeared in the mission-based questionnaire. The most critical tasks identified on the Mission Success scale in the mission-based questionnaire appear to be more like those that were identified as most critical on the Damage/Injury and Time Available scales of the ISD-based questionnaire.

Among the five combat effectiveness scales contained in the mission-based questionnaire, the most highly rated tasks on the Sustainability scale most overlapped those that were identified on the Mission Success scale, although the most highly rated tasks on the Sustainability scale also included those pertaining to movement and positioning of tanks. In general, the most highly rated tasks on each scale corresponded to the nature of the scale. For example, the tasks that were described as having the largest effect on the effective application of firepower all pertained to firing (e.g., Designates Sectors of Fire, Directs Tanks Move to Good Fields of Fire). Similarly, the tasks that were described as having the

Table 3

Tasks Described as Most and Least Critical
on Scales Contained in the Mission-Based Questionnaire

Scale	Most Critical Task	Mean Rating	Least Critical Task	Mean Rating
Firepower	Designates Sectors of Fire	4.54	Directs Guards be Posted	2.95
	Directs Tanks to Move to Good Fields of Fire	4.39	Requests Illumination	2.98
	Directs Fire and Maneuver be Conducted	4.37	Directs Air Guard be Posted	3.12
	Prepares a Fire Plan	4.35	Directs Chemical Alarms be Emplaced	3.12
	Directs Avenues of Approach be Covered	4.35	Submits SITREP	3.19
Mobility	Plans Displacement	4.51	Requests Illumination	2.48
	Selects and Announces Withdrawal Routes	4.41	Directs Chemical Alarms be Emplaced	2.82
	Directs Movement Into Defilade Position	4.39	Directs Air Guards be Posted	2.86
	Directs Assault be Started	4.26	Directs Wire Communications be Installed	2.81
	Directs Movement Into Over-watch Position	4.25	Directs Range Cards be Prepared	2.95
Command	Issues FRAGO	4.56	Requests Illumination	2.79
	Requests Wire Communications be Installed	4.27	Directs Tanks be Camouflaged	2.95
	Coordinates with Adjacent Platoon Leaders	4.23	Directs Air Guards be Posted	3.00
	Coordinates with FIST Leader	4.07	Directs Tank be Put in Turret Defilade	3.04
	Prepares a Fire Plan	4.05	Directs Obstacles, Mines, and Flares be Installed	3.11
Survivability	Directs Tanks be Camouflaged	4.61	Requests Illumination	3.02
	Directs Tanks be Put in Turret Defilade	4.57	Submits SITREP ^a	3.33
	Directs Movement Into Defilade Position	4.56	Submits SPOTREP	3.37
	Checks Positions for Suitability	4.46	Requests SPOTREPS	3.56
	Plans Displacement	4.43	Submits SITREP ^b	3.58

Table 3 cont'd.

Scale	Most Critical Task	Mean Rating	Least Critical Task	Mean Rating
Sustainability	Directs Movement Into Defilade Position	4.36	Requests Illumination	2.77
	Directs Enemy be Engaged ^c	4.32	Submits SITREP	3.28
	Directs Enemy be Engaged ^d	4.29	Directs Movement Into Designated Position	3.45
	Requests Indirect Fires	4.28	Submits SPOTREP	3.46
	Directs Tanks be Put in Turret Defilade	4.27	Request Team Patrol Reports	3.48
Mission Success	Directs Fire and Maneuver be Conducted	4.48	Requests Illumination	2.84
	Directs Enemy be Engaged ^e	4.46	Monitors TOWS	3.50
	Directs Avenues of Approach be Covered	4.45	Directs Ground Guards be Posted	3.59
	Directs Enemy be Engaged ^f	4.42	Requests Wire Communications be Installed	3.61
	Requests Indirect Fires	4.39	Directs Air Guards be Posted	3.66

Note. High mean ratings indicate high criticality.

- ^a Hasty Attack
- ^b Movement to Contact
- ^c Movement to Contact
- ^d Defend Battle Position
- ^e Defend Battle Position
- ^f Movement to Contact

largest effect on the effective use of mobility and maneuver involved different aspects of this factor (e.g., Plans Displacement, Directs Movement into Defilade Position).

The five tasks that were described as having the smallest effect on the successful accomplishment of the mission involved requesting of illumination, monitoring TOWs, installing wire communications, and posting guards. The least critical of these tasks on the Mission Success scale, Requests Illumination, was also described as having the smallest effect on all of the combat effectiveness scales except the Firepower scale on which it was described as having the second smallest effect. Another of the least critical tasks appearing on the Mission Success scale, Directs Air Guards be Posted, appeared among the tasks described as having the smallest effect on the Firepower, Mobility, and Command scales. Four of the five tasks that were described as having the smallest effect on survivability involved reporting (e.g., Submits SITREP, Submits SPOTREP).

In summary, the tasks that received the highest ratings on the Mission Success scale in the mission-based questionnaire pertained to attacking the enemy and appeared to be similar to the most critical tasks identified on the Damage/Injury and Time Available scales in the ISD-based questionnaire.

Discussion

A major purpose of this project was to examine the most critical platoon leader tasks identified using the Mission Success scale and to compare these tasks with those identified using the ISD-based scales. The most critical tasks identified using the Mission Success scale differed in the two types of questionnaires. The most critical tasks identified using the ISD-based questionnaire involved various aspects of planning (e.g., Chooses a Course of Action, Makes an Estimate of the Situation), while the most critical tasks identified using the mission-based questionnaire involved attacking the enemy (e.g., Directs Fire and Maneuver be Conducted, Directs Enemy by Engaged). It is important to note, however, that the mission-based questionnaire only contained 51 of the 161 tasks that were contained in the ISD-based questionnaire. Thus, the most critical tasks in the ISD-based questionnaire were not included in the mission-based questionnaire and therefore could not have appeared among the most critical tasks.

The most critical tasks on the Mission Success scale in the ISD-based questionnaire were similar to those that were most critical on the Time to Learn scale. This suggests that the tasks that have the largest impact on mission success are also most difficult to learn. However, the most critical tasks identified on the Mission Success scale in the mission-based questionnaire were similar to those that were most critical on the other two ISD-based scales (i.e., Damage/Injury, Time Available). This seems somewhat of a paradox in that all three ISD scales identified the most critical items that were identified using the Mission Success scale, but one of the ISD scales identified the same type of tasks that were identified on the Mission Success scale without scenarios while two of the scales identified the same types of tasks that were identified on the Mission Success scale with scenarios.

While the purpose for examining these results was to contrast the most and least critical tasks identified using the Mission Success scale with those identified using the ISD-based and combat effectiveness scales, an adequate comparison between the scales requires the application of correlational techniques. For example, despite the fact that the most critical tasks identified on the Mission Success scale on the ISD-based questionnaire were more similar to those identified on the Time to Learn scale than on the Damage/Injury scale, the correlation between the Mission Success scale and the Damage/ Injury scale (.84) was higher than the correlation between the Mission Success scale and the Time to Learn scale (.61). The results of these correlational analyses are presented later in this section of the report.

One final point concerns the confounding of scales and questionnaire types in this research. Ideally, both the ISD-based scales and the combat effectiveness scales should have been included in both sets of questionnaires. Moreover, all 161 tasks contained in the ISD-based questionnaire should have been contained in the mission-based questionnaire. Unfortunately, time and subject constraints prevented the adoption of a more ideal research design. The present design, although clearly not ideal, was intended to provide the maximum amount of information within the resources that were available.

Context Effects on Ratings of Mission Success

Results

Effects of Presenting a Scenario. The fifty-one platoon leader tasks that were rated on the Mission Success scale in the mission-based questionnaire were also rated on this scale in the ISD-based questionnaire. If the context provided by the scenarios in the mission-based questionnaire had an effect on the mission success ratings, then a significant difference would be expected between the two mean ratings obtained from these questionnaires. To determine whether the obtained differences were in fact statistically significant, the means for the 51 tasks were compared using analysis of variance (ANOVA). Several of the 51 tasks appeared in more than one scenario. Since the context provided by the different scenarios could have had different effects on the mission success ratings, a separate ANOVA was conducted for each scenario. Thus, four analyses were conducted, each analysis setting questionnaire type as the between-subjects factor and tasks as the within-subjects factor. Before conducting these ANOVAs, a single score had to be selected for each task that was repeated within a scenario. The mean rating of the task within the scenario was used for this score.

The results of the four ANOVAs are contained in Table 4. A significant main effect for questionnaire type was obtained only for the analysis of the tasks that were contained in the Occupy Battle Position scenario.

²See page 28.

Table 4

Analysis of Variance: Questionnaire Type and Task
Effects on Mission Success Ratings

Scenario	Source of Variation	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Movement to Contact					
	Between Subjects				
	Questionnaire Type	1	5.21	1.73	<u>ns</u>
	Error (Ss within questionnaire)	117	3.02		
	Within Subjects				
	Task	9	8.78	20.80	.01
	Task X Questionnaire	9	3.47	8.23	.01
	Error (Ss within task X questionnaire)	1053	0.42		
Hasty Attack					
	Between Subjects				
	Questionnaire Type	1	5.04	1.14	<u>ns</u>
	Error (Ss within questionnaire)	116	4.41		
	Within Subjects				
	Task	14	5.03	12.08	.01
	Task X Questionnaire	14	1.74	4.17	.01
	Error (Ss within task X questionnaire)	1624	0.42		
Defend Battle Position					
	Between Subjects				
	Questionnaire Type	1	0.09	0.00	<u>ns</u>
	Error (Ss within questionnaire)	113	3.40		
	Within Subjects				
	Task	10	13.77	26.27	.01
	Task X Questionnaire	10	2.68	5.11	.01
	Error (Ss within task X questionnaire)	1130	0.52		
Occupy Battle Position					
	Between Subjects				
	Questionnaire	1	93.62	14.73	.01
	Error (Ss within questionnaire)	113	6.35		
	Within Subjects				
	Task	22	5.96	14.60	.01
	Task X Questionnaire	22	0.84	2.05	.01
	Error (Ss within task X questionnaire)	2486	0.41		

All of the tasks appearing in this scenario were rated as having a larger effect on mission success when they were rated in the mission-based questionnaire than when they were rated in the ISD-based questionnaire. However, significant questionnaire type x task interactions were obtained in all four ANOVAs. These interactions indicated that the effects of the questionnaires differed among the items contained in each scenario. Consequently, post hoc comparisons were made to determine which tasks were rated differently in the two different types of questionnaires.

Simple t-tests comparing questionnaire types were conducted for the tasks contained in the three scenarios in which there was no significant main effect for questionnaire type. The mean rating for each task obtained when using the mission-based questionnaire was compared with the mean rating for the same task when using the ISD-based questionnaire. The results of these t-tests are contained in Table 5. There are two significant differences among the ten tasks appearing in the Movement to Contact scenario. The tasks Directs Movement Into Defilade Position and Directs Movement Into Overwatch Position were rated as having a significantly larger effect on the successful accomplishment of the mission when the tasks were rated using the mission-based questionnaire than when using the ISD-based questionnaire. Thus, the presence of the scenario in the mission-based questionnaire resulted in these two tasks being rated more critical.

Not all tasks that were rated differently in the two questionnaires were rated to be more critical in the mission-based questionnaire. Of the four tasks on which there were significant difference in the Hasty Attack scenario, two were rated as more critical when using the mission-based questionnaire, but two other tasks were rated as more critical when using the ISD-based questionnaire. The tasks Directs Movement Out of Attack Position and Directs Targets of Opportunity be Engaged were rated as having a larger effect on mission accomplishment when using the mission-based questionnaire, but the tasks Issues FRAGO and Submits SITREP were rated as having a larger effect on mission accomplishment when using the ISD-based questionnaire. This implies that the raters felt that the first two tasks were more critical in the context provided by the scenario than in other contexts while the last two tasks were seen as less critical in this context. A similar result was obtained from the analysis of the tasks contained in the scenario Defend Battle Position. Of the two tasks for which significant differences were obtained, one task (Designates Targets to TOW Section) was rated as being more critical in the mission-based questionnaire while the other (Requests Illumination) was rated as being more critical in the ISD-based questionnaire. For the 35 different ratings that were made using the three scenarios for which there was not a significant main effect for questionnaire type, there were eight significant differences. Five of the eight tasks were rated as more critical when the tasks were embedded in the scenarios contained in the mission-based questionnaire, while three were rated as more critical when the tasks were contained in the scenario-free ISD-based questionnaire.

Since both a significant main effect for questionnaire type and a significant questionnaire type x task interaction were obtained in the analysis of the tasks appearing in the scenario Occupy Battle Position, the post hoc comparisons that were conducted were designed to determine whether the difference between the two ratings for each task was larger or smaller

Table 5

Summary of t-tests Comparing Mean Mission Success Ratings
Obtained from Mission-Based and ISD-Based Questionnaires

Scenario	Mean Rating		<u>t</u>	<u>p</u>
	Mission-Based Questionnaire	ISD-Based Questionnaire		
Movement to Contact	(N=56)	(N=63)		
89	3.71	3.41	1.77	<u>ns</u>
67	4.11	3.49	4.11	<u>.01</u>
161	3.93	4.21	-1.67	<u>ns</u>
51	4.38	4.30	.66	<u>ns</u>
137	4.22	4.24	-.11	<u>ns</u>
138	4.12	4.21	-.61	<u>ns</u>
149	3.78	3.59	1.10	<u>ns</u>
26	4.34	4.38	-.33	<u>ns</u>
160	3.96	4.17	-1.25	<u>ns</u>
70	4.30	3.72	4.18	<u>.01</u>
Hasty Attack	(N=55)	(N=63)		
113	4.18	4.51	-2.28	<u>.05</u>
66	3.84	3.68	.95	<u>ns</u>
65	3.96	3.87	.58	<u>ns</u>
73	3.93	3.60	2.10	<u>.05</u>
137	4.38	4.24	1.09	<u>ns</u>
138	4.31	4.21	.73	<u>ns</u>
105	4.25	3.75	3.54	<u>.01</u>
54	4.47	4.27	1.58	<u>ns</u>
64	4.02	3.76	1.80	<u>ns</u>
139	4.20	4.09	.70	<u>ns</u>
32	4.38	4.13	1.86	<u>ns</u>
152	4.25	4.11	.96	<u>ns</u>
140	4.04	3.90	.56	<u>ns</u>
160	3.67	4.17	-2.64	<u>.01</u>
Defend Battle Position	(N=55)	(N=60)		
135	2.85	3.62	-4.12	<u>.05</u>
155	3.73	3.50	1.38	<u>ns</u>
137	4.23	4.23	-.04	<u>ns</u>
138	4.15	4.20	-.31	<u>ns</u>
25	3.91	3.53	2.21	<u>.05</u>
119	3.49	3.50	-.06	<u>ns</u>
161	3.93	4.18	-1.50	<u>ns</u>
103	3.91	3.70	1.12	<u>ns</u>
51	4.45	4.28	1.35	<u>ns</u>
157	3.96	3.85	.64	<u>ns</u>
160	4.07	4.15	-.45	<u>ns</u>

^aNumbers correspond to task numbers used in ISD-Based Questionnaire.

than would be expected based on the overall main effect for questionnaire type. Myer's (1979) method of post hoc analysis was used to construct F ratios. This method required the construction of a contrast between tasks to be applied to each questionnaire type. It then examined the variance between these contrasts across questionnaire types. The contrast developed for a task compared the rating of a task on one questionnaire or the other to the mean rating of the remaining tasks obtained on the same questionnaire. The F-test examined whether the difference between the focal task and the mean of the remaining tasks was the same for both types of questionnaires. That is, it determined whether the difference in the ratings of a task obtained from each of the two questionnaire types was different than the difference in the ratings of all the other tasks.

The results of these post hoc comparisons are presented in Table 6. Three significant contrasts were found. The difference in the ratings of the task Designates Tank Targets was larger than would be expected based on the overall difference in the ratings of the other tasks using the two types of questionnaires, while the differences in the ratings of two tasks, Directs Chemical Alarms be Emplaced and Prepares a Firing Plan, were smaller than would be expected. In summary, although the tasks appearing in the scenario Occupy Battle Position tended to be rated significantly more critical when they appeared in the mission-based questionnaire than when they appeared in the ISD-based questionnaire, the specific effect also depended upon the task being rated. For one task, this difference was larger than would have been expected from the overall difference between the two types of questionnaires, and for two tasks, this difference was smaller than would have been expected.

Effects of Different Scenarios. To determine whether the ratings of tasks in the mission-based questionnaire were affected by the scenarios in which they appeared, the mission success ratings obtained using different scenarios were compared for each of the six tasks that were contained in more than one scenario. The comparisons were made using one-way repeated measure analyses of variance. The results of these ANOVAs are contained in Table 7. Significance between scenario effects was obtained for only two of the six tasks--Requests Indirect Fires and Submits SITREP. Examination of the mean ratings for these tasks in Appendix E shows that the task Requests Indirect Fires was rated as being less critical in the Initiate Indirect Fire phase of Defend Battle Position ($\bar{X} = 4.09$) and in the Occupy Suppressive Fire Position phase of Movement to Contact ($\bar{X} = 4.16$) than in the Immediate Action phase of Movement to Contact ($\bar{X} = 4.32$), in the Hasty Attack ($\bar{X} = 4.39$), or in the Initiate Direct Fire phase of Defend Battle Position ($\bar{X} = 4.39$). The task Submits SITREP was rated as being more critical in the Develop Situation phase of Movement to Contact ($\bar{X} = 4.02$) and in Defend Battle Position ($\bar{X} = 4.09$) than in the Hasty Attack ($\bar{X} = 3.68$) or in the Occupy Suppressive Fire Position phase of Movement to Contact ($\bar{X} = 3.88$).

Discussion

The effects of providing a context for judging the effects of task performance on mission success was found to vary from task to task. Some tasks were judged to be more critical when they were rated in the mission-

Table 6

Analysis of Rating Method by Task
Interaction for Occupy Battle Position

Task	Mean Ratings		Ss Contrast	<u>F^c</u>	<u>p</u>
	Mission-Based Method ^a	ISD-Based Method ^b			
68	3.89	3.53	.02	<1	<u>ns</u>
34	4.47	4.04	.29	<1	<u>ns</u>
100	4.21	3.69	.55	1.35	<u>ns</u>
99	4.11	3.64	.24	<1	<u>ns</u>
57	3.64	3.31	.08	<1	<u>ns</u>
29	3.70	3.35	.06	<1	<u>ns</u>
22	4.38	3.89	.38	<1	<u>ns</u>
23	4.24	3.47	4.78	11.71	.01
6	4.28	3.85	.07	<1	<u>ns</u>
102	4.38	3.85	.63	1.55	<u>ns</u>
2	4.15	3.61	.77	1.89	<u>ns</u>
85	3.81	3.61	.97	2.36	<u>ns</u>
40	3.96	3.90	3.03	7.41	.01
78	4.07	3.76	.10	<1	<u>ns</u>
20	4.19	3.97	.73	1.79	<u>ns</u>
21	4.02	3.58	.11	<1	<u>ns</u>
19	4.30	3.76	.82	2.01	<u>ns</u>
121	4.19	4.14	3.34	8.17	.01
125	4.15	3.82	.07	<1	<u>ns</u>
159	4.21	4.02	.67	1.65	<u>ns</u>
120	4.28	3.89	.01	<1	<u>ns</u>
154	3.96	3.74	.74	1.80	<u>ns</u>
158	3.64	3.11	.73	1.78	<u>ns</u>
Total	4.10	3.72			

^a n = 53

^b n = 62

^c ms error (Ss within methods X tasks) = .4086

Table 7

Table Summarizing Analyses of Variance of Scenario Effects
on Mission Success Ratings for Six Platoon Leader Tasks

Platoon Leader Task (Task #) Source of Variation	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Directs Enemy be Engaged (51)				
Within Subjects				
Between Scenario	2	.22	.97	<u>ns</u>
Residual	110	.23		
Requests Indirect Fires (137)				
Within Subjects				
Between Scenario	4	.99	2.68	.05
Residual	216	.37		
Requests Indirect Fires be Adjusted (138)				
Within Subjects				
Between Scenario	1	.03	.25	<u>ns</u>
Residual	56	.14		
Requests SPOTREPS (149)				
Within Subject				
Between Scenario	1	.03	.25	<u>ns</u>
Residual	56	.14		
Submits SITREP (160)				
Within Subjects				
Between Scenario	3	2.16	4.66	.01
Residual	162	.46		
Submits SPOTREP (161)				
Within Subjects				
Between Scenario	1	.08	.21	<u>ns</u>
Residual	55	.39		

based questionnaire than when they were rated in the ISD-based questionnaire, but other tasks were judged to be less critical in the mission-based questionnaire. Which rating was more accurate could not be determined since no independent measure of task criticality was available. Nevertheless, this analysis showed that the presence of a context does affect the criticality ratings of some tasks. Excluding the scenario Occupy Battle Position in which there was a significant main effect for questionnaire type, the criticality ratings of approximately one-fourth of the tasks were found to be affected by the method used to assess task criticality. Of course, this proportion could be expected to vary with differences in the

scenarios that were used. That is, with a different set of scenarios, the proportion could be smaller or larger than the proportion obtained in the present study. However, the actual percentage of tasks affected by the type of questionnaire used to assess mission success would probably be larger than 25 percent of the tasks since the same task would probably appear in more than one scenario. Even if the questionnaire type had no effect for a task in one scenario, it could have an effect in another scenario.

Since a significant main effect for questionnaire type was obtained for the scenario Occupy Battle Position, the evidence obtained in the present study suggests that the mission success ratings of substantially more than 25 percent of the tasks would be affected by the type of questionnaire used. The post hoc analyses of the 23 tasks that were contained in that scenario simply identified the tasks in which the difference in the ratings obtained from the two types of questionnaires was greater or less than the difference that would have been expected based on the overall difference between the two methods. Thus, while only three tasks were greater or less than this expected difference, all of the 23 tasks received higher criticality ratings in the mission-based questionnaire than in the ISD-based questionnaire. Thus, the percentage of tasks whose mission success ratings were affected by the type of questionnaire used to measure mission success must be greater than 25 percent.

The analyses of the mission success ratings for the six tasks appearing in more than one scenario showed that the scenarios had a significant effect on two of the tasks. Since so few tasks were involved in these analyses, the results can only be considered as suggestive of potential scenario effects. Nevertheless, it is possible that the effects due to scenario differences may be large if the scenarios themselves differ widely.

Selecting Tasks for Training

Results

Effects of Questionnaire Type. The practical implications of using the mission-based questionnaire instead of the ISD-based questionnaire for assessing task criticality can be illustrated by comparing the tasks that would be chosen for training using these two methods. This illustration should be considered as only suggestive since the comparison could only be made with the 51 tasks that were included in both questionnaires.

Since the Mission Success scale most directly measured task criticality and since it was contained in both the mission-based questionnaire and the ISD-based questionnaire, the mean ratings obtained on this scale were used to select the tasks. Since six of the tasks in the mission-based questionnaire appeared in more than one scenario or in more than one phase of the same scenario, these tasks had more than one rating on the Mission Success scale. For the four tasks in which the previously described ANOVAs failed to result in a significant difference among the ratings, the overall mean across scenarios was used for the illustration. For the two tasks in

which the ANOVAs did result in a significant effect for scenarios, the highest mean rating received by the task was used for the illustration.

The actual number of tasks that can be selected for training depends, of course, upon many factors such as the time and resources available for training. If all of the tasks performed in a Military Occupational Specialty (MOS) could be trained, then the method used to assess task criticality would obviously have no effect whatsoever on the tasks selected for training. However, as the percentage of tasks that can be trained decreases, the effects of the method used to assess task criticality would increase. The maximum effect would occur when only one task could be selected for training. For the purpose of the illustration, it was assumed that half of the tasks (25) would be selected for training.

The selection was made by rank ordering the 51 tasks on the basis of their mean mission success rating. The 25 tasks with the highest mean scores would be selected for training, while the remaining 26 tasks would be rejected. The tasks that would be selected and rejected using mission success ratings from the mission-based questionnaire and from the ISD-based questionnaire are presented in Table 8. Eighteen of the tasks would have been selected for training regardless of the questionnaire used to assess their criticality. Similarly, 18 tasks would have been rejected using either questionnaire. However, seven of the tasks that would have been selected using the mission-based questionnaire would not have been selected for training had the ISD-based questionnaire been used, and seven of the tasks that would have been selected using the ISD-based questionnaire would not have been selected had the mission-based questionnaire been used.

Selecting Tasks for Training Based on Estimated Value. The Mission Success scale developed during this project represents an attempt to devise a measure of task criticality that corresponds to the TRADOC definition of the term. The research that has been conducted during this project has shown that task criticality as measured by the Mission Success scale is influenced by the mission and the context in which a task is performed. Measuring the criticality of all tasks performed in a particular duty position would be a slow process if it were necessary to determine their effects over the different missions and contexts in which they are performed.

Bessemer, Drucker, and Hoffman (1983) examined data obtained from the present study to determine the feasibility of using mission success ratings obtained without scenarios to select tasks for training. They used a multi-attribute utility approach in which they assumed that the mission success rating for a task in a particular mission could serve as a measure of its utility for that mission. The sum of the mission success ratings of a task over the different missions in which it appeared would reflect the total value of that task for training. Bessemer et al. (1983) then explored the possibility of estimating the value of a task by multiplying its mission success rating obtained from the scenario-free ISD-based questionnaire by the number of missions in which the task appeared in the mission-based questionnaire. This product, which was in essence a weighted mission success score, was found to be significantly related ($\rho = .76$) to the total value of the task obtained using the mission-based questionnaire.

Table 8

Tasks Selected or Rejected for Training Using
Mission Success Ratings Obtained from
Mission-Based and ISD-Based Questionnaires

Tasks Selected			Tasks Rejected
Both Questionnaires	Mission-Based Questionnaires	ISD-Based Questionnaires	Both Questionnaires
6	2	40	21
20	19	65	25
22	23	140	29
26	71	153	64
32	78	157	66
34	100	160	67
51	105	161	68
54			73
102			85
113			89
120			99
121			103
125			119
137			135
138			149
139			154
152			155
159			158

Note. Numbers correspond to task numbers used in ISD-Based Questionnaire.
See Appendix C for task titles.

Discussion

For purpose of illustration, it was assumed that half of the tasks could be selected for training. Considering only the 51 tasks that were included in the mission-based questionnaire, the analysis showed that 28% of the 25 tasks chosen for training using criticality scores obtained from one type of questionnaire would have been rejected using the other type of questionnaire. Since all of the these tasks that would have been selected by one method while being rejected by the other were in the upper half of the criticality distribution on one of the questionnaires, this is an important discrepancy. It is certainly possible that tasks that are critical to mission success may be overlooked as a result of the method used to assess task criticality. Of course, as the percentage of tasks selected for training increases beyond 50 percent, this possibility decreases. On the other hand, as the percentage of tasks selected for training decreases below 50 percent, this possibility increases.

For situations in which relatively few tasks can be selected for training, the methodology used to assess their criticality can have a large impact in determining those that are chosen. While it would be desirable to provide raters with descriptions of the different missions and contexts in which the tasks are performed, this procedure could require more time and resources than are often available to training developers. The procedure suggested by Bessemer et al. (1983) offers a viable alternative that can approximate mission success ratings obtained with scenarios, but without the actual need for scenarios. All that would be required is the weighting of each task rating by the number of missions in which the task is performed during combat.

Analysis of Mission Success Ratings

Results

The five combat effectiveness scales (e.g., Firepower, Mobility) were included in the mission-based questionnaire on the basis that these factors had a greater effect on the outcome of a mission than the factors that were recommended by the ISD model (e.g., Time to Learn, Time Available). If so, then mission success ratings would be expected to correlate higher with the five combat effectiveness scales than with the three ISD-based scales. Moreover, if the five combat scales affected mission success to a greater extent than the factors represented by the three ISD-based scales, ratings on the five combat scales would be better able to predict mission success ratings in a regression formula than would the three ISD scales.

Correlations With Mission Success Ratings. The correlations between mission success ratings and ratings on the three ISD-based scales are presented in Table 9. The intercorrelations between the three ISD-based scales are also presented in the table. When computing the intercorrelations among the scales, tasks were treated as the "subjects" of the analysis with mean ratings across raters as the data values for each task on each rating scale. Two of the three ISD-based scales were highly correlated with mission success ratings. The correlation between the Mission Success scale and the Damage/Injury scale was .84, while the correlation between the Mission Success scale and the Time to Learn scale was .61. Time Available was unrelated to mission success. Time to Learn ratings also correlated highly with Damage/Injury ratings (.52) and with Time Available ratings (.51), but Damage/Injury and Time Available were unrelated.

The correlations between mission success ratings and ratings on the five combat effectiveness scales are presented in Table 10. The intercorrelations between the five combat effectiveness scales are also presented in the table. All five combat effectiveness scales correlated significantly with mission success. The highest correlations with mission success ratings were obtained by the Sustainability scale (.81) and the Firepower scale (.78), although high correlations were also obtained by Survivability (.67) and Mobility (.51). The intercorrelations among four of the five combat effectiveness scales (Firepower, Mobility, Survivability, and Sustainability) were statistically significant. The high

Table 9

Intercorrelations Among ISD-Based and
Mission Success Scales Across 161 Tasks
Appearing in the ISD-Based Questionnaire

Scale	Scale		
	Mission Success	Damage/ Injury	Time Available
Damage/Injury	.84**		
Time Available	.08	-.10	
Time to Learn	.61**	.52**	.51**

** $p < .01$

correlation between Survivability and Sustainability (.90) suggests that the respondents did not differentiate between the two factors. The only scale which did not always correlate significantly with the other scales was the Command scale. It correlated significantly with the Firepower (.27) and Mobility (.35) scales, but not with the Survivability or Sustainability scales.

Table 10

Intercorrelations Among Combat Effectiveness and
Mission Success Scales Across 66 Tasks
Appearing in the Mission-Based Questionnaire

Scale	Scale				
	Mission Success	Fire- power	Mobility	Command	Surviva- bility
Firepower	.78**				
Mobility	.51*	.27*			
Command	.32*	.28*	.35**		
Survivability	.67**	.41**	.45**	-.17	
Sustainability	.81**	.56**	.40**	.06	.90**

* $p < .05$

** $p < .01$

Although it was anticipated that the Mission Success scale would correlate higher with the five combat effectiveness scales than with the three ISD-based scales, this result was not obtained. In fact, the Mission Success scale correlated higher with the Damage/Injury scale (.84) than with any of the five combat effectiveness scales. Time Available was the only ISD-based scale that was unrelated to mission success.

To further explore the relationship between the three ISD-based scales and the five combat effectiveness scales, the intercorrelations between the eight scales were calculated for the 51 tasks appearing in both the ISD-based and mission-based questionnaires. The intercorrelations were actually based on a total of 66 sets of ratings since each rating of a task was treated as a separate task whenever it appeared in a different scenario. The intercorrelations are presented in Table 11. The results show that the Damage/Injury scale correlated highly or moderately with all of the combat effectiveness scales except the Command scale. Time Available did not correlate highly with any of the five combat effectiveness scales, although Time to Learn showed a moderate correlation with Firepower (.34) and Command (.29). These intercorrelations show that the Damage/Injury scale was just as highly related to the five combat effectiveness scales as it was to the two other ISD-based scales.

While the Damage/Injury scale appeared related to the five combat effectiveness scales and to the Time to Learn scale, the Time Available scale was related only to the Time to Learn scale. The direction of the

Table 11

Intercorrelations Among ISD-Based Scales and
Combat Effectiveness Scales Across 66 Task Ratings

Scales	Scales						
	Damage/ Injury	Time Avail.	Time to Learn	Fire- power	Mobil- ity	Com- mand	Surviva- bility
Time Available	-.38**						
Time to Learn	.40**	.35**					
Firepower	.65**	.16	.34**				
Mobility	.38**	.23	.23	.27*			
Command	.02	.14	.29*	.28*	.35**		
Survivability	.54**	.02	.06	.41**	.45**	-.17	
Sustainability	.55**	.02	.18	.56**	.40	.06	.90**

* $p < .05$

** $p < .01$

correlation between Time Available and Time to Learn shows that tasks that were rated as allowing the platoon leader the least time to begin were also the easiest tasks to learn.

Regression Analyses. The results of the regression analysis of the mission success scores obtained from the ISD-based questionnaire are contained in Table 12. The Damage/Injury scale showed the largest contribution to the regression equation although Time to Learn also contributed significantly. On the other hand, the remaining ISD factor, Time Available, did not contribute significantly to the regression equation. Damage/Injury and Time to Learn were retained with significant betas in a reduced model. The multiple R^2 (.74) between these two scales and mission success ratings is significantly larger ($p < .01$) than the zero order R^2 of either the Damage/Injury scale (.70) or Time to Learn scale (.38).

Table 12

Summary of Regression Analysis of Mission Success
Ratings Obtained in the ISD-Based Questionnaire

	<u>Standardized Regression Weights</u>			<u>R</u>	<u>R²</u>
	Damage/ Injury	Time to Learn	Time Available		
Full Model	.74**	.19**	.06	.86**	.75**
Reduced Model	.71**	.24**		.86**	.74**

** $p < .01$

The results of the regression analysis of the mission success scores obtained from the mission-based questionnaire are contained in Table 13. Four of the five combat effectiveness scales contributed significantly to the regression equation, although the Sustainability and Firepower scales showed the largest contributions. The Survivability scale was the only combat effectiveness scale that did not contribute to the regression equation. The fact that it did not contribute to the regression equation can be attributed to its high correlation with the Sustainability scale (.90). Thus, even though survivability was highly correlated with mission success (.67), the variance that it accounted for in the mission success ratings was already accounted for by sustainability ratings.

It had been anticipated that the five combat effectiveness scales would be better able to predict mission success ratings than would the three ISD-based scales. Although both sets of scales were able to predict these ratings, the combat effectiveness scales were better able to predict them. While the three ISD-based scales could account for 75% of the variance in the mission success ratings, the five combat effectiveness scales could account for 86% of the variance.

Table 13

Summary of Regression Analysis of Mission Success Ratings
Obtained in the Mission-Based Questionnaire

	Standardized Regression Weights					<u>R</u>	<u>R</u> ²
	Fire- power	Mobility	Command	Surviva- bility	Sustaina- bility		
Full Model	.44**	.14*	.14*	.08	.43*	.93**	.86**
Reduced Model	.43**	.15**	.11*		.50**	.93**	.86**

* $p < .05$ ** $p < .01$

Interactions with Scenarios. To examine the possibility that the contributions of the combat effectiveness scales to mission success would vary over the different scenarios, a regression analysis was conducted that would examine the interaction between scenarios and the scales. The analysis was conducted by performing the following sequence of steps: (1) entering the ratings scales for the reduced equations, (2) entering a set of coded vectors representing the scenarios in which the tasks were rated, (3) entering the set of product terms of each scenario variate times each rating scale, (4) and examining the changes in \underline{R}^2 . The results of this analysis are presented in Table 14.

Table 14

Summary of Interaction Analysis of Scenarios by Task
Effects on Mission Success Ratings

	<u>R</u>	<u>R</u> ²	$\Delta \underline{R}^2$	F fgr <u>R</u> ²
Ratings Components (Fire Power, Mobility, Command, Sustainability)	.93	.86		
Scenarios-Coded Vectors	.94	.87	.01	1.80
Interactions Terms	.96	.92	.05	3.36**

** $p < .01$

The set of scenario variates did not significantly change the percent of variance accounted for in mission success ratings. The set of four combat effectiveness ratings could account for 86% of the variance in mission success ratings, but adding the scenario variates to the regression equation increased this to only 87%. Multicollinearity constrained the inclusion of the set of product terms so that three of the twelve product terms could not be included in the regression solution. However, the set of product terms that were entered into the regression solution significantly ($p < .01$) increased R^2 from .87 to .92. To uncover the specific nature of these interactions, separate regressions were calculated for each of the four scenarios. Reduced equations for these separate regressions are presented in Table 15.

Table 15

Summary of Regression Analyses of Mission
Success for Each Scenario

Scenario	<u>Standardized Regression Weights</u>				<u>R</u>	<u>R²</u>
	Fire- power	Mobility	Command	Sustaina- bility		
Movement to Contact	.93	-	-	-	.93	.86
Hasty Attack	.93	-	-	-	.93	.86
Defend Battle Position	-	.35	-	.66	.99	.98
Occupy Battle Position	.66	.28	-	.40	.93	.86

For two of the scenarios, Movement to Contact and Hasty Attack, only one combat effectiveness scale, Firepower, entered the regression equation. For the scenario Defend Battle Position, two scales, Sustainability and Mobility, entered the regression equation, while all scales except the Command scale entered the equation for the scenario Occupy Battle Position. While all four combat effectiveness scales entered the regression equation when the analysis was performed over all four scenarios, they never entered the equations together when the analyses were performed separately. And although the regression weights do appear to vary substantially across the four scenarios, the importance of this variation is diminished when the correlations between the overall reduced composite (i.e., the equation derived across scenarios) and mission success ratings are examined within each scenario. That is, when predictions of mission success ratings are made within each scenario using the single regression equation that was derived for all four scenarios combined, the correlations are .90, .94, .97 and .90 for Action on Contact, Hasty Attack, Defend Battle Position, and Occupy Battle Position, respectively. These correlations approximate closely the multiple correlations for the four regression equations developed within each scenario suggesting that the relative weights among

the rating scales are less important than the scales themselves. That is, the multicollinearity among the components is large enough that shifting the relative size of the regression weights does little to affect the overall predictability of mission success ratings by the combat effectiveness scales.

Cross-Method Comparisons. The final correlational analysis involved a validation of the regression composite for the ISD-based criticality scales against mission success ratings obtained from the mission-based questionnaire rather than from the ISD-based questionnaire. Similarly, it involved a validation of the regression composite for the combat effectiveness scales against mission success ratings obtained from the ISD-based questionnaire rather than from the mission-based questionnaire. Thus, estimated mission success values derived from the regression composite for the ISD-based criticality scales were correlated with actual mission success ratings obtained from the mission-based questionnaire, and estimated values derived from the regression composite for the combat effectiveness scales were correlated with actual mission success ratings obtained from the ISD-based questionnaire. These correlations were based on 66 ratings made of 51 tasks. The tasks that were rated more than once (i.e., tasks that were contained in separate scenarios or in different phases of the same scenario) were treated as separate tasks for this analysis. The results of these analyses are presented in Table 16. The table also contains the correlations between the composite indices and mission success ratings separately for the subset of tasks within each scenario.

The correlation between the two sets of regression composites was .67 for the total sample of 66 tasks, while the correlation between the two sets of mission success ratings was .57. Although the correlations between the two sets of composites were fairly consistent from scenario to scenario, the correlations between the two sets of mission success ratings were higher for the tasks appearing in the two defensive scenarios than in the two offensive scenarios.

The ISD-based composite, which correlated .76 with mission success ratings obtained using the ISD-based questionnaire, correlated almost as well with mission success ratings obtained from the mission-based questionnaire (.69). In fact, the ISD-based composite correlated slightly higher with mission success ratings obtained using the mission-based questionnaire than with ratings obtained using the ISD-based questionnaire among the tasks included in each of the two offensive scenarios. The regression composite comprised on the combat effectiveness scales, on the other hand, correlated much higher with mission success ratings obtained using the mission-based questionnaire (.93) than with the ratings obtained from the ISD-based questionnaire (.45). This difference was especially pronounced for the tasks included in the two offensive scenarios. While the combat effectiveness composite correlated almost as well as the ISD-based scale composite with mission success ratings obtained using the ISD-based questionnaire for the tasks appearing in the two defensive scenarios, it correlated much less than did the ISD-based composite with these ratings for tasks appearing in the two offensive scenarios.

Table 16

Correlations Among ISD-Based and Mission-Based Rating Scale
Composites with ISD-Based and Mission-Based
Ratings of Mission Success on 66 Tasks

Scenario	ISD-Based Composite with		Mission-Based Composite with		ISD-Based Composite ^b	ISD-Based ^c Success
	ISD Success	M-B Success ^a	ISD Success	M-B Success ^a		
Movement to Contact	.74**	.80**	.24**	.90**	.73**	.54**
Hasty Attack	.71**	.80**	.25*	.94**	.67**	.49**
Defend Battle Position	.75**	.60**	.65**	.97**	.64**	.71**
Occupy Battle Position	.85**	.81**	.72**	.90**	.71**	.77**
Total Sample of Scenario Tasks	.76**	.69**	.45**	.93**	.67**	.57**

^a M-B Success = Mission-Based Success

^b ISD Composite with Mission-Based Composite

^c ISD Success with Mission-Based Success

* $p < .05$

** $p < .01$

Discussion

An important issue raised in this study concerned the nature of the mission success judgments themselves. What do respondents consider when they rate the effects of task performance on the accomplishment of the mission? The correlations between mission success scores obtained on the ISD-based questionnaire and the ISD-based criticality factors suggests that respondents equate mission success with amount of equipment damage and/or personal injury and, to a lesser extent, with the amount of time required to learn a task. The time available before performing the task was not equated with mission success even though it is one of the three factors included in the ISD model for assessing task criticality. The correlations between mission success scores obtained on the mission-based questionnaire and the combat effectiveness scales suggests that respondents also equate mission success with sustainability and fire power, and to a lesser extent, with survivability, mobility, and command and control. Statistically, the regression analyses showed that mission success ratings in the ISD-based questionnaire equated with ratings on the Damage/Injury scale, while

mission success ratings in the mission-based questionnaire equated ratings on the Sustainability and Firepower scales.

The expectation that mission success ratings would be related more to the five combat effectiveness scales than to the three ISD-based scales was only partially confirmed by the study. Two of the three ISD-based criticality scales were as related to mission success as measured on the ISD-based questionnaire as were the five combat effectiveness scales on the mission-based questionnaire. Only Time Available seemed unrelated to mission success among the three ISD-based scales or the five combat effectiveness scales. The Damage/Injury scale, however, was similar to the five combat effectiveness scales since it reflected actual consequences of task performance. That is, it was like the Firepower scale, the Mobility scale, or any of the other combat effectiveness scales in the sense that it referred to an effect that resulted from the performance of the task. In fact, Damage/Injury ratings correlated as high with four of the five combat effectiveness scales as they did with the other two ISD-based criticality scales. The fact that the ISD composite related to mission success ratings appears to be due to the contribution of the Damage/Injury scale to the regression equation. Its beta weight in the formula (.74) was approximately four times as large as that of the Time to Learn scale (.19) and twelve times as large as that of the Time Available scale. Time to Learn appears to reflect the difficulty involved in learning to perform a task during training and does not reflect any consequence of task performance during combat. Nevertheless, the scale correlated .61 with mission success ratings. This may be due to an assumption on the part of the raters that tasks that are difficult to learn may show a larger distribution among soldiers in their abilities to perform them than tasks that are easy to learn. It may further be assumed that this variation in learning may result in wider differences in the performance levels of these tasks in combat. Since there would be a greater chance of poor task performance for tasks that are difficult to learn, then it would follow that they would be more critical than tasks that are easy to learn. This is not because they are inherently more critical in the sense that the quality of their performance can have a larger effect on the mission outcome, but that they are less likely to be performed adequately and therefore are more likely to have an effect on the mission outcome.

Time available, on the other hand, reflects a characteristic of the task that precedes its performance. It therefore differs from any of the combat effectiveness scales which all reflect characteristics of tasks that occur subsequent to their performance. While it can be assumed that this characteristic would also be related to consequences in the sense that tasks offering the platoon leader a great deal of time enable the platoon leader to perform the task better (e.g., they can get help in doing the task), the ratings of most tasks on this scale indicated that the raters felt that few tasks would offer the platoon leader more than several minutes before he must start the task. Thus, there would be insufficient time to take whatever actions would lead to improved task performance.

Based on this argument that tasks that are difficult to learn are more likely to have an effect on the outcome of a mission (because tasks that are hard to learn are more likely to be performed wrong, not because they have an inherently greater effect on the outcome), then it would be

expected that the Mission Success scale would be more highly correlated with the Time to Learn scale than with the Time Available scale.

In summary, the data obtained during this study seems to indicate that respondents consider the consequences of task performance when rating its effects on the mission. For this reason, the Damage/Injury scale correlated as well with mission success ratings as did the combat effectiveness scales in the mission-based questionnaire. Since Time to Learn also could affect the performance of a task, and therefore its consequences, it too correlated with mission success, although not quite to the same level. Time Available, which should have the least effect on the performance of a task, did not correlate significantly with mission success ratings at all. The important point to be considered here, however, is whether the Damage/Injury and Time to Learn scales themselves can predict mission success ratings as well as the combat effectiveness scales. While both sets of scales were found to predict mission success ratings, the combat effectiveness scales appeared to do the better job. They could account for 86 percent of the variance in the mission success ratings while the ISD-based scales could account for only 74 percent of the variance.

One of the findings was that for the tasks that appeared in both questionnaires, the ISD-based composite (i.e., Damage/Injury and Time to Learn) predicted mission success ratings in both the ISD-based questionnaire and the mission-based questionnaire almost equally well, while the combat effectiveness composite (i.e., Sustainability, Firepower, Mobility, and Command) predicted mission success ratings far better in the mission-based questionnaire than in the ISD-based questionnaire. In fact, the combat effectiveness composite was able to account for 86 percent of the variance in the mission success ratings in the mission-based questionnaire, but only 20 percent of the variance in the ISD-based mission success ratings. In contrast, the ISD-based criticality scales could account for 58 percent of the variance on the mission success ratings in the ISD-based questionnaire, and 48 percent of the variance of mission success from the scenario questionnaire.

CONCLUSIONS

The purpose of this research was to develop a measure of task criticality that conforms to the TRADOC requirement that tasks be selected for training according to their effects on mission accomplishment. The current ISD guidelines for assessing task criticality bear, at best, only an indirect relationship to mission success. The research described in this report explored the possibility of obtaining more direct measures of tasks criticality based on ratings of the effects of task performance on the successful accomplishment of the unit mission. The research also examined the importance of providing raters a description of the mission and the context in which the tasks are performed when judging the effects of task performance on mission accomplishment.

The measure that was developed, the Mission Success scale, was found to have high interrater reliability although contrary to expectations, the reliability of the scale did not increase when raters were provided scenarios describing the mission and the context in which the tasks were

performed. Correlations of mission success ratings with ratings of factors generally acknowledged to determine mission success and with the criteria recommended by ISD for determining task criticality showed that raters considered relevant factors (e.g., firepower, survivability, damage to equipment) when judging task criticality on the Mission Success scale. Further evidence of the construct validity of the scale came from the high correlation (.93) between mission success ratings and a regression composite on combat effectiveness factors.

Because of the resources required to identify the different combat situations that affect task criticality, and because of the time required to prepare scenarios describing these situations, it is unlikely that training developers will be able to duplicate the procedures used during the research described in this report. Unfortunately, the results suggest that a lack of the mission context provided by scenarios detracts from the validity of the mission success ratings as measures of task criticality. Bessemer et al. (1983), however, using data obtained from the present study, demonstrated that mission success ratings obtained with scenarios can be approximated by multiplying mission success ratings obtained without scenarios by the number of missions in which a task is performed.

Subsequent to the performance of this research, the U.S. Army Training Board (1983) advocated the use of direct ratings of two factors for assessing task criticality--(1) the importance of a task for mission accomplishment and (2) the importance of a task for survivability. The results obtained during the present study strongly support this general approach to the measurement of task criticality. The findings by Bessemer, et al. (1983) indicate that the method can be improved by weighting these ratings by the number of missions in which the tasks appear, particularly when only few tasks can be selected for training.

Although the results of the present study demonstrated the construct validity of the Mission Success scale as a measure of task criticality, the external validity of the scale can only be established by relating mission success scores to consequences of task performance observed during combat. While battle simulations incorporating human performance factors will eventually enable these effects to be estimated, the current state-of-the-art is not sufficient to enable these estimates to be made at the present time.

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APPENDIX A

Selection of Tasks for Criticality Assessments
and Tank Company Mission Survey

SELECTION OF TASKS FOR CRITICALITY ASSESSMENTS

Drucker and O'Brien (1981)¹ identified 191 tasks that were performed by tank platoon leaders during combat operations. This number was considered too large to be included in the criticality assessments, particularly in the mission-based questionnaire, since more time would be required to judge this number of tasks than would be available to the subjects. Consequently it was decided to select the tasks to be judged from those identified by Drucker and O'Brien earlier, and to limit the number to that which subjects could handle within a single class period.

One of the purposes of the project was to develop a methodology for preparing training objectives for tactical leadership tasks and to demonstrate the methodology by preparing training objectives for a sample of tactical tasks performed by tank platoon leaders. These training objectives could then be used to prepare programs for training platoon leaders on simulators as soon as the simulators became available. Consequently, the tasks chosen for criticality assessment on the two questionnaires were selected according to the degree to which platoon leaders could benefit from practicing these tasks on a simulator and the degree to which mission accomplishment could be enhanced by this training. In particular, two criteria were used to select the tasks for criticality assessments--(1) the importance of using enemy forces and/or coordinating friendly forces when training platoon leaders to perform the mission during which the tasks were performed and (2) the degree to which the platoon leader could affect the outcome of these missions. The first criterion was selected since enemy and friendly force actions could be introduced more efficiently on simulators than in field exercises. The second criterion was selected to maximize the effectiveness of this training.

To obtain information on these criteria, instructors at the Command, Staff, and Doctrine Department of the Army School at Fort Knox were asked to rank order 21 company missions on these two criteria. They were also asked to rank order the phases of each mission on the criteria. The questionnaire used for this survey, the Tank Company Mission Survey, is contained later in this Appendix.

Rankings were made by 18 instructors. The mean ranking received by each of the 21 missions on each of the two criteria is contained in Table A-1. The missions whose outcomes were judged to be most affected by the actions of the platoon leader were the Hasty Attack, Defend Battle Position, Movement to Contact, and Tactical Movement. The missions for which it was judged most important to use other forces during training were the Hasty Attack, Movement to Contact, Defend Battle Position, and Deliberate Attack.

Since Hasty Attack, Defend Battle Position, and Movement to Contact were rated high on both criteria, they were selected for the contexts that

¹Drucker, E.H., & O'Brien, R.E. Mission-based analyses of army training requirements. Volume I: Final Report (HumRRO Final Report FR-MTRD(KY)-81-2). Alexandria, VA: Human Resources Research Organization, February 1981.

Table A-1

Mean Ranking Received by Company Missions
on Two Criteria^a

Company Mission	Criterion	
	Outcome ^b	Importance ^c
Hasty Attack	4.0	3.5
Defend Battle Position	5.3	5.1
Movement to Contact	6.4	4.9
Deliberate Attack	8.1	5.2
Counterattack	8.1	5.6
Delay	9.4	7.8
Displace to Alternate Battle Position	8.7	9.6
Tactical Movement	7.7	11.2
Occupy Battle Position	8.0	12.6
Consolidate on Objective	8.3	12.3
Plan Offensive Operations	11.7	10.7
Plan Defensive Operations	11.9	10.9
Withdraw	12.8	11.0
By Pass	14.2	12.2
Tactical Road March	12.3	14.8
Exploitation and Pursuit	15.2	12.4
Reorganize	13.4	14.9
Occupy Forward Assembly Area	13.6	14.9
Holding	16.9	12.9
Occupy Rear Assembly Area	16.7	18.6
Administrative Road March	19.0	20.2

Note. Low rank values indicate large platoon leader effects on mission outcome or high importance of using enemy/friendly forces during training; possible rank values range from 1.0 to 21.0.

^an = 18

^bOutcome = Platoon leader effect on mission outcome.

^cImportance of using enemy or friendly forces during platoon leader training.

would be prepared for the mission-based questionnaire. Deliberate Attack, which ranked sixth on the mission outcome criterion and fourth on the coordinating forces criterion, was not selected since the platoon leader tasks performed during this mission were also performed during Hasty Attack. Counterattack, which ranked high on both criteria, was not chosen for the same reason. Instead, Occupy Battle Position was chosen as the fourth mission that would be included in the mission-based questionnaire. Thus, the tasks selected for the questionnaire would be those performed during two offensive missions and two defensive missions. Moreover, by selecting these two offensive missions and these two defensive missions, platoon leaders could practice the transition from one mission to another since the missions in each pair would normally be performed in sequence.

After the missions were selected, the tasks performed during these missions were examined. The number of tasks performed during each mission was still too large for the mission-based questionnaire. Therefore, the rankings of the mission phases were used to further limit the number of tasks. The mean rankings of the mission phases on the two criteria are contained in Table A-2. On the basis of these results, tasks performed only during the following phases were selected for criticality assessment in the mission-based questionnaire:

<u>Mission</u>	<u>Phase</u>
Movement to Contact	Action on Contact
Hasty Attack	Fire and Maneuver
Occupy Battle Position	Occupy and Organize Battle Position

Using the rankings on the two criteria, the tasks performed during the Fire and Maneuver phase of Defend Battle Position would also have been selected for the mission-based questionnaire. Since the tasks performed during this phase were the same as those performed during the Fire and Maneuver phase of the Hasty Attack (as were the tasks performed during the Counterattack), the tasks performed during the Surveillance, Indirect Fire, and Direct Fire phases were chosen instead. The specific tasks that were included in each mission phase are shown in the mission-based questionnaire which is contained in Appendix B.

Since the ISD-based questionnaire would not contain descriptions of the contexts in which the tasks were performed, more tasks could be included in it than in the mission-based questionnaire. However, since 191 platoon leader tasks had been identified earlier, and since each task would have to be rated on six different scales, the number of tasks selected for the questionnaire was reduced. Tasks that were performed only in missions ranked among the bottom third of the combined distribution on the two criteria were eliminated from the questionnaire. The tasks that were eliminated appeared in only one or more of the following seven missions: Bypass, Holding, Withdraw, Occupy Rear Assembly Area, Occupy Forward Assembly Area, Administrative Road March, and Tactical Road March. A total of 30 platoon leader tasks were eliminated in this manner leaving

161 tasks for the questionnaire. The 161 tasks are shown in Appendix C of this report which is the ISD-based questionnaire.

Table A-2
Mean Rankings Received by Company Mission Phases
on Two Criteria^a

Company Mission Phase	Criterion	
	Outcome ^b	Importance ^c
Movement to Contact		
Movement	1.9	2.0
Action on Contact	1.1	1.0
Hasty Attack		
Suppressive Fires	1.9	1.9
Fire and Manpower	1.1	1.1
Occupy Battle Position		
Move to Battle Position	2.0	1.9
Occupy and Organize Battle Position	1.0	1.1
Defend Battle Position		
Surveillance	4.0	3.8
Indirect Fire	4.1	4.4
Direct Fire	2.1	2.3
Fire and Maneuver	2.0	1.7
Counterattack	2.8	2.8

Note. Low rank values indicate large platoon leader effects on mission success or high importance of using enemy/friendly forces during training; possible rank values range from 1.0 to 2.0 for Movement to Contact, Hasty Attack, and Occupy Battle Position, and from 1.0 to 5.0 for Defend Battle Position.

^a n = 15

^b Outcome = Platoon leader affect on mission outcome.

^c Importance= Importance of using enemy or friendly forces during platoon leader training.

NAME _____

DATE _____

DIVISION _____

POSITION _____

TANK COMPANY MISSION SURVEY

The Human Resources Research Organization (HumRRO) and the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) are developing a new method for measuring task criticality. Officers in AOAC will soon be asked to judge the criticality of a sample of platoon leader tasks using the new method. Since the method is rather complex, we are trying to reduce the number of tasks whose criticality will be assessed. The tasks will be chosen from missions whose outcomes are most affected by the actions of platoon leaders and whose training most requires the use of opposing enemy forces and/or coordinating friendly forces.

Because of your experience in the Command, Staff, and Doctrine Department of the Armor School, you are asked to judge the degree to which mission outcomes are affected by the actions of platoon leaders and rate the importance of using opposing enemy forces and/or coordinating friendly forces during platoon leader training. The instructions inside this booklet will tell you precisely what to do. If you have any questions, please call Mr. Eugene Drucker at 4-5618 or 4-8113.

When you have finished, please put the materials back in the envelope and return them to the point of contact in your Department Office.

1. Company missions or activities differ in the degree to which platoon leader actions can affect their outcomes. The success or failure of some missions or activities may depend greatly upon the actions of the platoon leaders, while the success or failure of other missions or activities may depend little upon the actions of the platoon leaders.

A. Remove the WHITE cards from the envelope.

B. Each WHITE card contains the name of a mission or activity performed by a tank company. Please sort the cards into three equal piles according to the degree to which the actions of the platoon leaders affect their outcomes. One pile should contain the names of the seven missions or activities whose outcomes are most determined by the actions of the platoon leaders. Another pile should contain the names of the seven missions or activities whose outcomes are least determined by the actions of the platoon leaders. The remaining pile should contain the names of the seven missions or activities whose outcomes are determined to an intermediate degree by the actions of the platoon leaders.

C. Select the pile containing the names of the seven missions or activities whose outcomes are most determined by the actions of the platoon leaders. Circle the letter "M" on each of the seven cards. Then sort the cards again according to the degree to which the actions of the platoon leaders affect the outcomes of the missions or activities. Circle the number "1" on the card for the mission or activity that is affected most by the actions of the platoon leaders, the number "2" on the card for the mission or activity that is affected second most, and so on until one number is circled on each card.

D. Select the pile containing the names of the seven missions or activities whose outcomes are determined to an intermediate degree by the actions of the platoon leaders. Circle the letter "I" on each of the seven cards. Then sort the cards again according to the degree to which the actions of the platoon leaders affect the outcomes of the missions or activities. Circle the number "1" on the card for the mission or activity that is affected most by the actions of the platoon leaders, the number "2" on the card for the mission or activity that is affected second most, and so on until one number is circled on each card.

2. Most company missions or activities are performed in phases. For each of the following missions or activities, please rank order the phases according to the degree to which their outcomes are determined by the actions of the platoon leaders. Write the number "1" by the phase whose outcome is most determined by the actions of the platoon leaders, the number "2" by the phase whose outcome is determined second most, and so on if there are more than two phases.

When you have finished ranking the phases, please rate the contribution of the platoon leaders to the outcome of each phase. If the platoon leaders play an extremely important role in determining the success or failure of the phase, place an "X" in the space next to the word IMPORTANT. If the platoon leaders do not play an important role in determining the success or failure of the phase, then place an "X" in the space next to the word UNIMPORTANT. Use the other three spaces to show intermediate amounts of importance. The greater the importance of the platoon leaders to the outcome of the mission or activity phase, the closer the "X" should be to the word IMPORTANT. The less the importance of the platoon leaders to the outcome of the mission or activity phase, the closer the "X" should be to the word UNIMPORTANT.

PHASE OF COMPANY MISSION
OF ACTIVITY

IMPORTANCE OF PLATOON LEADERS' ROLE IN DETERMINING
THE OUTCOME OF MISSION OR ACTIVITY PHASES

MOVEMENT TO CONTACT

___ Movement Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Action on Contact Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

HASTY ATTACK

___ Suppressive Fires Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Fire and Maneuver Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

BYPASS

___ Suppressive Fires Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Conduct Bypass and Continue Movement to Contact Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

HOLDING

___ Occupy Hasty Defense Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Defend Position Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

E. Select the pile containing the names of the seven missions or activities whose outcomes are least determined by the actions of the platoon leaders. Circle the letter "L" on each of the seven cards. Then sort the cards and circle the numbers as before.

F. Return the WHITE cards to the envelope and complete the rest of the questionnaire.

PHASE OF COMPANY MISSION
OR ACTIVITY

IMPORTANCE OF PLATOON LEADERS' ROLE IN DETERMINING
THE OUTCOME OF MISSION OR ACTIVITY PHASES

DELIBERATE ATTACK

___ Suppressive Fires Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Fire and Maneuver Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Assault Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

EXPLOITATION AND PURSUIT

___ Movement Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Action on Contact Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

OCCUPY BATTLE POSITION

___ Move to Battle Position Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Occupy and Organize Battle Position Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

DEFEND BATTLE POSITION

___ Surveillance Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Indirect Fire Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Direct Fire Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Fire and Maneuver Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Counterattack Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTNAT

DISPLACE TO ALTERNATE BATTLE POSITION

___ Move to Alternate Battle Position Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTNAT
___ Occupy and Organize Battle Position Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

WITHDRAW

___ Covering Fire Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Breaking Contact Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

DELAY

___ Surveillance Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Indirect Fire Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Direct Fire Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Fire and Maneuver Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Counterattack Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Withdrawal Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

PHASE OF COMPANY MISSION
OR ACTIVITY

IMPORTANCE OF PLATOON LEADERS' ROLE IN DETERMINING
THE OUTCOME OF MISSION OR ACTIVITY PHASES

COUNTERATTACK

___ Suppressive Fires Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Fire and Maneuver Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

OCCUPY REAR ASSEMBLY AREA

___ Move Into
___ Assembly Area Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Organize Defense of
___ Assembly Area Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Conduct Sustaining
___ Actions Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

OCCUPY FORWARD ASSEMBLY AREA

___ Move Into
___ Assembly Area Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Organize Defense of
___ Assembly Area Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Conduct Sustaining
___ Actions Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

PLAN OFFENSIVE OPERATIONS

___ Receipt of
___ Warning Order Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Receipt of
___ Operation Order Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Complete Readiness Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

PLAN DEFENSIVE OPERATIONS

___ Receipt of
___ Warning Order Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Receipt of
___ Operation Order Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Complete Readiness Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

ADMINISTRATIVE ROAD MARCH

___ Depart Old Area Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Movement Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Arrive New Area Phase IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

PHASE OF COMPANY MISSION
OR ACTIVITY

IMPORTANCE OF PLATOON LEADERS' ROLE IN DETERMINING
THE OUTCOME OF MISSION OR ACTIVITY PHASES

TACTICAL ROAD MARCH

____ Depart Old Area Phase	IMPORTANT: ____ : ____ : ____ : ____ : ____ : UNIMPORTANT
____ Movement Phase	IMPORTANT: ____ : ____ : ____ : ____ : ____ : UNIMPORTANT
____ Arrive New Area Phase	IMPORTANT: ____ : ____ : ____ : ____ : ____ : UNIMPORTANT

TACTICAL MOVEMENT

____ Conduct Tactical 1 Movement Phase	IMPORTANT: ____ : ____ : ____ : ____ : ____ : UNIMPORTANT
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CONSOLIDATE ON OBJECTIVE

____ Sweep Enemy from Objective Phase	IMPORTANT: ____ : ____ : ____ : ____ : ____ : UNIMPORTANT
____ Prepare for Enemy Counterattack Phase	IMPORTANT: ____ : ____ : ____ : ____ : ____ : UNIMPORTANT
____ Prepare to Continue Attack Phase	IMPORTANT: ____ : ____ : ____ : ____ : ____ : UNIMPORTANT

REORGANIZE

____ Conduct Resupply Phase	IMPORTANT: ____ : ____ : ____ : ____ : ____ : UNIMPORTANT
____ Perform Maintenance Phase	IMPORTANT: ____ : ____ : ____ : ____ : ____ : UNIMPORTANT
____ Reestablish Communications Phase	IMPORTANT: ____ : ____ : ____ : ____ : ____ : UNIMPORTANT
____ Reassign Personnel Phase	IMPORTANT: ____ : ____ : ____ : ____ : ____ : UNIMPORTANT

3. During combat, military commanders must react to the actions of the enemy and coordinate their own actions with those of other friendly forces. The opportunity to react to a "thinking" enemy or to coordinate with friendly forces is often not included in platoon leader training.

A. Remove the YELLOW cards from the envelope.

B. Each YELLOW card contains the name of a mission or activity performed by a tank company. Please sort the cards into three equal piles according to the importance of using enemy forces and/or coordinating friendly forces when training platoon leaders to perform the missions or activities. One pile should contain the names of the seven missions or activities for which it is most important to use these forces when training platoon leaders. Another pile should contain the names of the seven missions or activities for which it is least important to use these forces when training platoon leaders. The remaining pile should contain the names of the seven missions or activities for which it is intermediate in importance to use these forces when training platoon leaders.

C. Select the pile containing the names of the seven missions or activities for which it is most important to use enemy forces and/or coordinating friendly forces when training platoon leaders. Circle the letter "M" on each of the seven cards. Then sort the cards again according to the importance of using these forces when training platoon leaders to perform the missions or activities. Circle the number "1" on the card for the mission or activity in which it is most important to use these forces, the number "2" on the card for the mission or activity in which it is next in importance, and so on until one number is circled on each card.

D. Select the pile containing the names of the seven missions or activities for which it is intermediate in importance to use enemy forces and/or coordinating friendly forces when training platoon leaders. Circle the letter "I" on each of the seven cards. Then sort the cards again according to the importance of using these forces when training platoon leaders to perform the missions or activities. Circle the number "1" on the card for the mission or activity in which it is most important to use these forces, the number "2" on the card for the mission or activity in which it is next in importance, and so forth until one number is circled on each card.

E. Select the pile containing the names of the seven missions or activities for which it is least important to use enemy forces and/or coordinating friendly forces when training platoon leaders. Circle the letter "L" on each of the seven cards. Then sort the cards and circle the numbers as before.

F. Return the YELLOW cards to the envelope and complete the rest of the questionnaire.

4. For each of the following missions or activities, please rank order the phases according to the importance of using opposing enemy and/or coordinating friendly forces when training platoon leaders. Write the number "1" by the phase in which it is most important to use these forces when training platoon leaders, the number "2" by the phase in which it is second in importance, and so on if there are more than two phases.

When you have finished ranking the phases, please rate the importance of using opposing enemy and/or coordinating friendly forces when training platoon leaders to perform each phase. If you feel that it is extremely important to use these forces during platoon leader training, place an "X" next to the word IMPORTANT. If you feel that it is not important to use these forces during platoon leader training, place an "X" next to the word UNIMPORTANT. Use the other spaces to show intermediate amounts of importance. The greater the importance of using opposing enemy and/or coordinating friendly forces when training platoon leaders to perform the phases, the closer the "X" should be to the word IMPORTANT. The less the importance of using these forces when training platoon leaders to perform the phase, the closer the "X" should be to the word UNIMPORTANT.

PHASE OF COMPANY MISSION OR ACTIVITY	IMPORTANCE OF USING OPPOSING ENEMY AND/OR COORDINATING FRIENDLY FORCES WHEN TRAINING PLATOON LEADERS
MOVEMENT TO CONTACT	
___ Movement Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Action on Contact Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
HASTY ATTACK	
___ Suppressive Fires Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Fire and Maneuver Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
BYPASS	
___ Suppressive Fires Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Conduct Bypass and Continue Movement to Contact Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
HOLDING	
___ Occupy Hasty Defense Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Defend Position Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

PHASE OF COMPANY MISSION
OR ACTIVITY

IMPORTANCE OF USING OPPOSING ENEMY AND/OR
COORDINATING FRIENDLY FORCES WHEN TRAINING
PLATOON LEADERS

DELIBERATE ATTACK

<input type="checkbox"/> Suppressive Fires Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Fire and Maneuver Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Assault Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT

EXPLOITATION AND PURSUIT

<input type="checkbox"/> Movement Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Action on Contact Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT

OCCUPY BATTLE POSITION

<input type="checkbox"/> Move to Battle Position Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Occupy and Organize Battle Position Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT

DEFEND BATTLE POSITION

<input type="checkbox"/> Surveillance Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Indirect Fire Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Direct Fire Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Fire and Maneuver Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Counterattack Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT

DISPLACE TO ALTERNATE BATTLE POSITION

<input type="checkbox"/> Move to Alternate Battle Position Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Occupy and Organize Battle Position Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT

WITHDRAW

<input type="checkbox"/> Covering Fire Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Breaking Contact Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT

DELAY

<input type="checkbox"/> Surveillance Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Indirect Fire Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Direct Fire Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Fire and Maneuver Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Counterattack Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT
<input type="checkbox"/> Withdrawal Phase	IMPORTANT: _____:_____:_____:_____:_____:UNIMPORTANT

PHASE OF COMPANY MISSION
OR ACTIVITY

IMPORTANCE OF USING OPPOSING ENEMY AND/OR
COORDINATING FRIENDLY FORCES WHEN TRAINING
PLATOON LEADERS

COUNTERATTACK

___ Suppressive Fires Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

___ Fire and Maneuver Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

OCCUPY REAR ASSEMBLY AREA

___ Move Into
___ Assembly Area Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

___ Organize Defense of
___ Assembly Area Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

___ Conduct Sustaining
___ Actions Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

OCCUPY FORWARD ASSEMBLY AREA

___ Move Into
___ Assembly Area Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

___ Organize Defense of
___ Assembly Area Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

___ Conduct Sustaining
___ Actions Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

PLAN OFFENSIVE OPERATIONS

___ Receipt of
___ Warning Order Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

___ Receipt of
___ Operation Order Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

___ Complete Readiness Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

PLAN DEFENSIVE OPERATIONS

___ Receipt of
___ Warning Order Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

___ Receipt of
___ Operation Order Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

___ Complete Readiness Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

ADMINISTRATIVE ROAD MARCH

___ Depart Old Area Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

___ Movement Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

___ Arrive New Area Phase

IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

PHASE OF COMPANY MISSION
OR ACTIVITY

IMPORTANCE OF USING OPPOSING ENEMY AND/OR
COORDINATING FRIENDLY FORCES WHEN TRAINING
PLATOON LEADERS

TACTICAL ROAD MARCH

___ Depart Old Area Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Movement Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Arrive New Area Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

TACTICAL MOVEMENT

___ Conduct Tactical	
1 Movement Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

CONSOLIDATE ON OBJECTIVE

___ Sweep Enemy from	
___ Objective Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Prepare for Enemy	
___ Counterattack Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Prepare to Continue	
___ Attack Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

REORGANIZE

___ Conduct Resupply Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Perform Maintenance Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Reestablish	
___ Communications Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT
___ Reassign Personnel Phase	IMPORTANT: ___ : ___ : ___ : ___ : ___ : UNIMPORTANT

APPENDIX B

Mission-Based Questionnaire

NAME _____

DATE _____

BRANCH _____

PLATOON LEADER TASK SURVEY
FORM A

The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) and the Human Resources Research Organization (HumRRO) are developing a method for preparing training objectives for leadership tasks. The method will be used to prepare training objectives for critical platoon leader tasks performed during tank platoon operations.

Because of your experience in armor, you are asked to rate various platoon leader tasks along a number of different dimensions. The criticality of these tasks will be determined on the basis of these ratings, and training objectives will be prepared for the tasks found to be most critical.

The instructions inside this booklet will describe in detail how the ratings are to be made. If you have any questions, raise your hand and they will be answered.

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TECHNICAL DIRECTOR, ARMY RESEARCH INSTITUTE
FOR THE BEHAVIORAL AND SOCIAL SCIENCES
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR PERSONNEL

DEPARTMENT OF THE ARMY

INSTRUCTIONS

This questionnaire contains four scenarios describing different missions performed by a tank team--Action on Contact, Hasty Attack, Occupy Battle Position, and Defend Battle Position. Following each scenario are lists of tasks performed by the platoon leaders and six different rating scales. The rating scales are:

- 1) Effect of task performance on effective application of fire power by the platoon
- 2) Effect of task performance on effective mobility and maneuver by the platoon
- 3) Effect of task performance on effective command, control, communication, and coordination within the platoon.
- 4) Effect of task performance on survivability of men and equipment within the platoon
- 5) Effect of task performance on the capability of the platoon to sustain its combat effectiveness
- 6) Effect of task performance on the successful accomplishment of the team mission

Your job will be to read each scenario and then rate the tasks on each of the six scales. The instructions before each set of rating scales will describe how the scales are to be used.

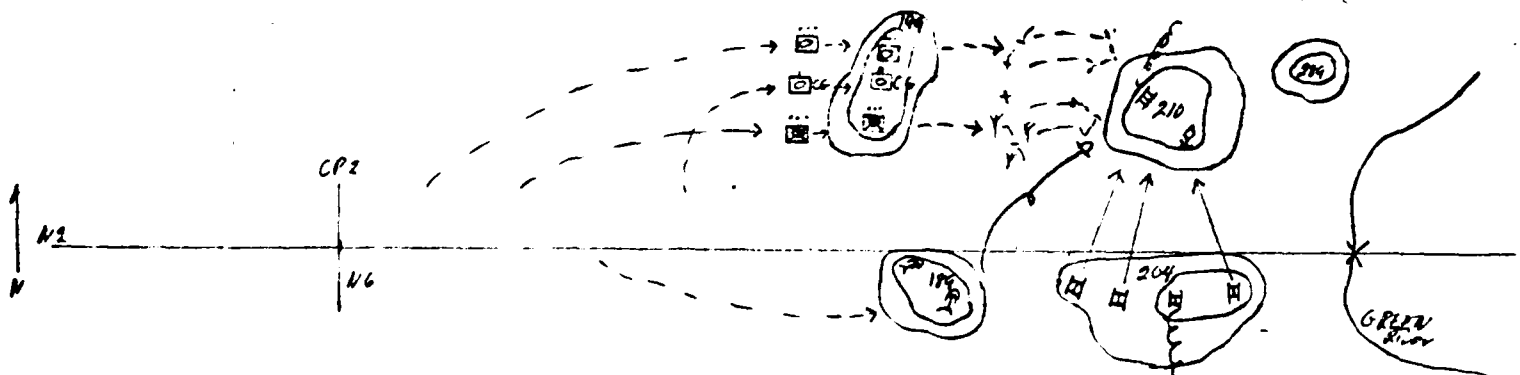
Most platoon leader tasks include two components--decisions and actions. Although only the actions are stated in the lists of tasks, you should consider both the decision and the action when you rate each task. For example, one of the tasks you will rate is "directs cease fire." Before a platoon leader can direct his platoon to cease fire, he must first decide to cease fire. Therefore when you rate this task, you must consider both the decision to cease fire and the command to cease fire.

Indicate your rating for each task by placing an "X" in the appropriate space.

HASTY ATTACK

1. General Situation. A/2/37 Armor, consisting of two tank platoons, one infantry platoon, and one TOW section, is conducting a movement to contact. The mission of the team is to conduct a movement to contact East along Highway N2, secure Hill 210, and from that position support B/2/31 Infantry's attack to seize the bridge over GREEN River. The lead platoon has been fired on by an enemy tank and an ATGM located on Hill 210. Terrain in the area of operations consists of rolling hills with sparsely wooded areas between the hills, visibility is 5000 meters, and there has been no precipitation during the last 72 hours. A FIST is with the team command group and the task forces command group and B/2/31 Infantry follows the team along Highway N2.

2. Special Situation. The team commander has received a SITREP from the lead platoon leader and has told him to continue to engage the enemy. The team commander assembles the other platoon leaders on Hill 199 and issues his FRAGO for the attack on Hill 210. The team will attack in ten minutes with two platoons abreast, infantry platoon on the right. The attack position is Hill 199, the assault position is the fence line 300 meters West of Hill 210. Artillery fire will shift when the assault position is reached, direct suppressive fires will shift when the assault is within 100 meters of the objective, and the TOW section will support the attack from Hill 189. The fire and maneuver element platoon leaders have returned to their platoons. The maneuver tank platoon leader issues a hasty attack FRAGO; directs movement into attack position, into attack formation, and out of attack position; requests and adjusts indirect fires and directs engagement of targets of opportunity; directs fire and maneuver be conducted; directs movement into assault formation and requests indirect fires be shifted; directs assault be started and requests suppressive fires be shifted; requests indirect fires and directs suppressive fires be stopped; and submits a SITREP.



Listed below are the tasks performed by the platoon leader of the fire and maneuver platoon during the Hasty Attack described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the effective application of fire power by the platoon. How he performed other tasks may have had a large effect on the effective application of fire power by the platoon.

Please rate the following tasks that were performed by the platoon leader of the fire and maneuver platoon according to how much of an effect their performance could have had on the effective application of fire power by the platoon. Remember to consider the decisions included in the task.

CONDUCT FIRE AND MANEUVER

PLATOON LEADER TASK	EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER				
	None	Small	Moderate	Large	Extreme
1. Issues FRAGO	_____	_____	_____	_____	_____
2. Directs movement into attack position	_____	_____	_____	_____	_____
3. Directs movement into attack formation	_____	_____	_____	_____	_____
4. Directs movement out of attack position	_____	_____	_____	_____	_____
5. Requests indirect fires	_____	_____	_____	_____	_____
6. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
7. Directs targets of opportunity be engaged	_____	_____	_____	_____	_____
8. Directs fire and maneuver be conducted	_____	_____	_____	_____	_____

CONDUCT THE ASSAULT

PLATOON LEADER TASK	EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER				
	None	Small	Moderate	Large	Extreme
1. Directs movement into assault formation	_____	_____	_____	_____	_____

EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER

PLATOON LEADER TASK

None Small Moderate Large Extreme

2. Requests indirect fires
be shifted

3. Directs assault be started

4. Requests suppressive fires
be shifted

5. Requests indirect fires be
stopped

6. Requests direct suppressive
fires be stopped

7. Submits SITREP

Listed below are the tasks performed by the platoon leader of the fire and maneuver platoon during the Hasty Attack described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the effective use of mobility and maneuver by the platoon. How he performed other tasks may have had a large effect on the effective use of mobility and maneuver by the platoon.

Please rate the following tasks that were performed by the platoon leader of the fire and maneuver platoon according to how much of an effect their performance could have had on the effective use of mobility and maneuver by the platoon. Remember to consider the decisions included in the task.

CONDUCT FIRE AND MANEUVER

PLATOON LEADER TASK	EFFECT ON EFFECTIVE USE OF MOBILITY AND MANEUVER				
	None	Small	Moderate	Large	Extreme
1. Issues FRAGO	_____	_____	_____	_____	_____
2. Directs movement into attack position	_____	_____	_____	_____	_____
3. Directs movement into attack formation	_____	_____	_____	_____	_____
4. Directs movement out of attack position	_____	_____	_____	_____	_____
5. Requests indirect fires	_____	_____	_____	_____	_____
6. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
7. Directs targets of opportunity be engaged	_____	_____	_____	_____	_____
8. Directs fire and maneuver be conducted	_____	_____	_____	_____	_____

CONDUCT THE ASSAULT

PLATOON LEADER TASK	EFFECT ON EFFECTIVE USE OF MOBILITY AND MANEUVER				
	None	Small	Moderate	Large	Extreme
1. Directs movement into assault formation	_____	_____	_____	_____	_____

EFFECT ON EFFECTIVE USE OF MOBILITY AND MANEUVER

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
2. Requests indirect fires be shifted	_____	_____	_____	_____	_____
3. Directs assault be started	_____	_____	_____	_____	_____
4. Requests suppressive fires be shifted	_____	_____	_____	_____	_____
5. Requests indirect fires be stopped	_____	_____	_____	_____	_____
6. Requests direct suppressive fires be stopped	_____	_____	_____	_____	_____
7. Submits SITREP	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the fire and maneuver platoon during the Hasty Attack described in the scenario. How he performed some of these tasks may have had no effect whatsoever on effective command, control, communication, and coordination within the platoon. How he performed other tasks may have had a large effect on the effective command, control, communication and coordination within the platoon.

Please rate the following tasks that were performed by the platoon leader of the fire and maneuver platoon according to how much of an effect their performance could have had on effective command, control, communication and coordination within the platoon. Remember to consider the decisions included in the task.

CONDUCT FIRE AND MANEUVER

EFFECT ON EFFECTIVE COMMAND, CONTROL, COMMUNICATION, AND COORDINATION

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
1. Issues FRAGO	_____	_____	_____	_____	_____
2. Directs movement into attack position	_____	_____	_____	_____	_____
3. Directs movement into attack formation	_____	_____	_____	_____	_____
4. Directs movement out of attack position	_____	_____	_____	_____	_____
5. Requests indirect fires	_____	_____	_____	_____	_____
6. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
7. Directs targets of opportunity be engaged	_____	_____	_____	_____	_____
8. Directs fire and maneuver be conducted	_____	_____	_____	_____	_____

CONDUCT THE ASSAULT

EFFECT ON EFFECTIVE COMMAND, CONTROL, COMMUNICATION, AND COORDINATION

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
1. Directs movement into assault formation	_____	_____	_____	_____	_____

EFFECT ON EFFECTIVE COMMAND, CONTROL,
COMMUNICATION, AND COORDINATION

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
2. Requests indirect fires be shifted	_____	_____	_____	_____	_____
3. Directs assault be started	_____	_____	_____	_____	_____
4. Requests suppressive fires be shifted	_____	_____	_____	_____	_____
5. Requests indirect fires be stopped	_____	_____	_____	_____	_____
6. Requests direct suppressive fires be stopped	_____	_____	_____	_____	_____
7. Submits SITREP	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the fire and maneuver platoon during the Hasty Attack described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the survivability of men and equipment within the platoon. How he performed other tasks may have had a large effect on the survivability of men and equipment within the platoon.

Please rate the following tasks that were performed by the platoon leader of the fire and maneuver platoon according to how much of an effect their performance could have had on the survivability of men and equipment within the platoon. Remember to consider the decisions included in the tasks.

CONDUCT FIRE AND MANEUVER

PLATOON LEADER TASK	EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT				
	None	Small	Moderate	Large	Extreme
1. Issues FRAGO	_____	_____	_____	_____	_____
2. Directs movement into attack position	_____	_____	_____	_____	_____
3. Directs movement into attack formation	_____	_____	_____	_____	_____
4. Directs movement out of attack position	_____	_____	_____	_____	_____
5. Requests indirect fires	_____	_____	_____	_____	_____
6. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
7. Directs targets of opportunity be engaged	_____	_____	_____	_____	_____
8. Directs fire and maneuver be conducted	_____	_____	_____	_____	_____

CONDUCT THE ASSAULT

PLATOON LEADER TASK	EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT				
	None	Small	Moderate	Large	Extreme
1. Directs movement into assault formation	_____	_____	_____	_____	_____

EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
2. Requests indirect fires be shifted	_____	_____	_____	_____	_____
3. Directs assault be started	_____	_____	_____	_____	_____
4. Requests suppressive fires be shifted	_____	_____	_____	_____	_____
5. Requests indirect fires be stopped	_____	_____	_____	_____	_____
6. Requests direct suppressive fires be stopped	_____	_____	_____	_____	_____
7. Submits SITREP	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the fire and maneuver platoon during the Hasty Attack described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the capability of the platoon to sustain its combat effectiveness. How he performed other tasks may have had a large effect on the capability of the platoon to sustain its combat effectiveness.

Please rate the following tasks that were performed by the platoon leader of the fire and maneuver platoon according to how much of an effect their performance could have had on the capability of the platoon to sustain its combat effectiveness. Remember to consider the decisions included in the task.

CONDUCT FIRE AND MANEUVER

PLATOON LEADER TASK	EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS				
	None	Small	Moderate	Large	Extreme
1. Issues FRAGO	_____	_____	_____	_____	_____
2. Directs movement into attack position	_____	_____	_____	_____	_____
3. Directs movement into attack formation	_____	_____	_____	_____	_____
4. Directs movement out of attack position	_____	_____	_____	_____	_____
5. Requests indirect fires	_____	_____	_____	_____	_____
6. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
7. Directs targets of opportunity be engaged	_____	_____	_____	_____	_____
8. Directs fire and maneuver be conducted	_____	_____	_____	_____	_____

CONDUCT THE ASSAULT

PLATOON LEADER TASK	EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS				
	None	Small	Moderate	Large	Extreme
1. Directs movement into assault formation	_____	_____	_____	_____	_____

EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
2. Requests indirect fires be shifted	_____	_____	_____	_____	_____
3. Directs assault be started	_____	_____	_____	_____	_____
4. Requests suppressive fires be shifted	_____	_____	_____	_____	_____
5. Requests indirect fires be stopped	_____	_____	_____	_____	_____
6. Requests direct suppressive fires be stopped	_____	_____	_____	_____	_____
7. Submits SITREP	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the fire and maneuver platoon during the Hasty Attack described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the successful accomplishment of the team mission. How he performed other tasks may have had a large effect on the successful accomplishment of the team mission.

Please rate the following tasks that were performed by the platoon leader of the fire and maneuver platoon according to how much of an effect their performance could have had on the successful accomplishment of the team mission. Remember to consider the decisions included in the tasks.

CONDUCT FIRE AND MANEUVER

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
1. Issue FRAGO	_____	_____	_____	_____	_____
2. Directs movement into attack position	_____	_____	_____	_____	_____
3. Directs movement into attack formation	_____	_____	_____	_____	_____
4. Directs movement out of attack position	_____	_____	_____	_____	_____
5. Requests indirect fires	_____	_____	_____	_____	_____
6. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
7. Directs targets of opportunity be engaged	_____	_____	_____	_____	_____
8. Directs fire and maneuver be conducted	_____	_____	_____	_____	_____

CONDUCT THE ASSAULT

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
1. Directs movement into assault formation	_____	_____	_____	_____	_____

EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION

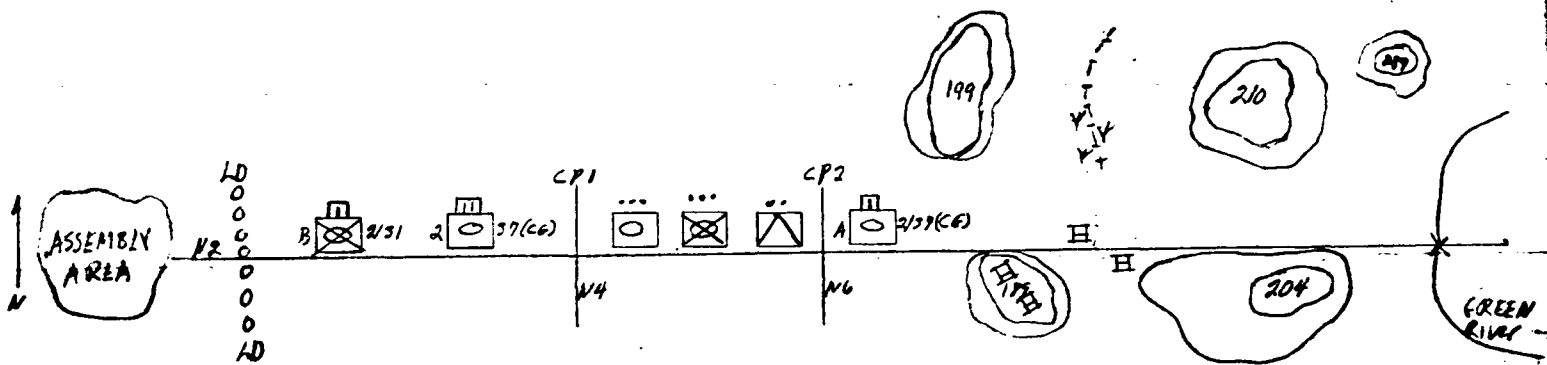
PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
2. Requests indirect fires be shifted	_____	_____	_____	_____	_____
3. Directs assault be started	_____	_____	_____	_____	_____
4. Requests suppressive fires be shifted	_____	_____	_____	_____	_____
5. Requests indirect fires be stopped	_____	_____	_____	_____	_____
6. Requests direct suppressive fires be stopped	_____	_____	_____	_____	_____
7. Submits SITREP	_____	_____	_____	_____	_____

SCENARIO

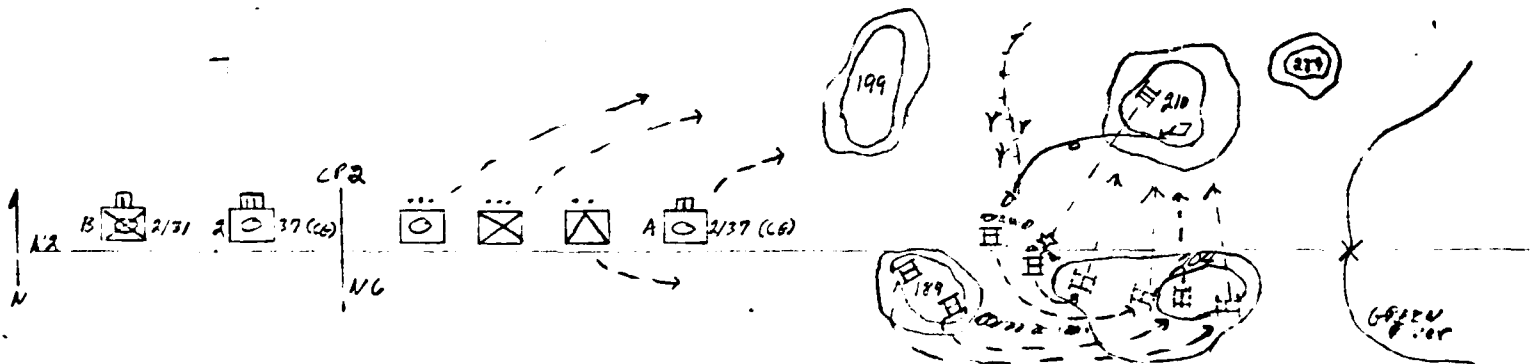
MOVEMENT TO CONTACT

ACTION ON CONTACT

1. General Situation. A/2/37 Armor, consisting of two tank platoons, one infantry platoon, and one TOW section, is conducting a movement to contact. The mission of the team is to conduct a movement to contact East along Highway N2, secure Hill 210, and from that position support B/2/31 Infantry's attack to seize the bridge over GREEN River. Enemy stragglers reported fleeing on foot East of RJ N2-N4 and enemy light reconnaissance vehicles are reported in the vicinity of Hill 210. Terrain in the area of operations consists of rolling hills with sparsely wooded areas between the hills, visibility is 500 meters, and there has been no precipitation during the last 72 hours. A FIST is with the team command group and the task force command group and B/2/31 Infantry follows the team along Highway N2.



2. Special Situation. The first platoon of A/2/37 Armor, the lead unit of the team has been moving East of RJ N2-N6 in a bounding overwatch formation. The trail section of the platoon has occupied an overwatch position on Hill 189 and the lead section (platoon leader commanding) has reached the forward edge of Hill 204 when it is fired on by an enemy tank and an ATGM on Hill 210. The platoon leader orders the lead section to pop smoke and move into a defilade position. He then directs the enemy be engaged, requests indirect fire, develops the situation, and submits a SITREP. The other platoons move to suppressive fire positions, engage the enemy, request indirect fire, and submit SITREPs.



Listed below are the tasks performed by the platoon leader of the first platoon during the Action on Contact described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the effective application of fire power by the platoon. How he performed other tasks may have had a large effect on the effective application of fire power by the platoon.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the effective application of fire power by the platoon. Remember to consider the decisions included in the task.

IMMEDIATE ACTION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER				
	None	Small	Moderate	Large	Extreme
1. Directs smoke be popped	_____	_____	_____	_____	_____
2. Directs movement into defilade position	_____	_____	_____	_____	_____
3. Submits SPOTREP	_____	_____	_____	_____	_____
4. Directs enemy be engaged	_____	_____	_____	_____	_____
5. Requests indirect fires	_____	_____	_____	_____	_____
6. Requests indirect fires be adjusted	_____	_____	_____	_____	_____

DEVELOP THE SITUATION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER				
	None	Small	Moderate	Large	Extreme
1. Requests SPOTREPS	_____	_____	_____	_____	_____
2. Develops the situation	_____	_____	_____	_____	_____
3. Submits SITREP	_____	_____	_____	_____	_____

The following tasks were performed by the platoon leader of the second platoon during the Action on Contact described in the scenario. Please rate them according to how much of an effect their performance could have had on the effective application of fire power by the platoon. Remember to consider the decisions included in the tasks.

OCCUPY SUPPRESSIVE FIRE POSITION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER				
	None	Small	Moderate	Large	Extreme
1. Directs movement to over-watch position	_____	_____	_____	_____	_____
2. Directs enemy be engaged	_____	_____	_____	_____	_____
3. Requests SPOTREPS	_____	_____	_____	_____	_____
4. Requests indirect fires	_____	_____	_____	_____	_____
5. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
6. Submits SITREP	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Action on Contact described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the effective use of mobility and maneuver by the platoon. How he performed other tasks may have had a large effect on the effective use of mobility and maneuver by the platoon.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the effective use of mobility and maneuver by the platoon. Remember to consider the decisions included in the tasks.

IMMEDIATE ACTION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE USE OF MOBILITY AND MANEUVER				
	None	Small	Moderate	Large	Extreme
1. Directs smoke be popped	_____	_____	_____	_____	_____
2. Directs movement into defilade position	_____	_____	_____	_____	_____
3. Submits SPOTREP	_____	_____	_____	_____	_____
4. Directs enemy be engaged	_____	_____	_____	_____	_____
5. Requests indirect fires	_____	_____	_____	_____	_____
6. Requests indirect fires be shifted	_____	_____	_____	_____	_____

DEVELOP THE SITUATION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE USE OF MOBILITY AND MANEUVER				
	None	Small	Moderate	Large	Extreme
1. Requests SPOTREPS	_____	_____	_____	_____	_____
2. Develops the situation	_____	_____	_____	_____	_____
3. Submits SITREP	_____	_____	_____	_____	_____

The following tasks were performed by the platoon leader of the second platoon during the Action on Contact described in the scenario. Please rate them according to how much of an effect their performance could have had on the effective use of mobility and maneuver by the platoon. Remember to consider the decisions included in the tasks.

OCCUPY SUPPRESSIVE FIRE POSITION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE USE OF MOBILITY AND MANEUVER				
	None	Small	Moderate	Large	Extreme
1. Directs movement to over-watch position	_____	_____	_____	_____	_____
2. Directs enemy be engaged	_____	_____	_____	_____	_____
3. Requests SPOTREPS	_____	_____	_____	_____	_____
4. Requests indirect fires	_____	_____	_____	_____	_____
5. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
6. Submits SITREP	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Action on Contact described in the scenario. How he performed some of these tasks may have had no effect whatsoever on effective command, control, communication, and coordination within the platoon. How he performed other tasks may have had a large effect on effective command, control, communication, and coordination within the platoon.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on effective command, control, communication, and coordination within the platoon. Remember to consider the decisions included in the tasks.

IMMEDIATE ACTION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE COMMAND, CONTROL, COMMUNICATION, AND COORDINATION				
	None	Small	Moderate	Large	Extreme
1. Directs smoke be popped	_____	_____	_____	_____	_____
2. Directs movement into defilade position	_____	_____	_____	_____	_____
3. Submits SPOTREP	_____	_____	_____	_____	_____
4. Directs enemy be engaged	_____	_____	_____	_____	_____
5. Requests indirect fires	_____	_____	_____	_____	_____
6. Requests indirect fires be shifted	_____	_____	_____	_____	_____

DEVELOP THE SITUATION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE COMMAND, CONTROL, COMMUNICATION, AND COORDINATION				
	None	Small	Moderate	Large	Extreme
1. Requests SPOTREPS	_____	_____	_____	_____	_____
2. Develops the situation	_____	_____	_____	_____	_____
3. Submits SITREP	_____	_____	_____	_____	_____

The following tasks were performed by the platoon leader of the second platoon during the Action on Contact described in the scenario. Please rate them according to how much of an effect their performance could have had on effective command, control, communication, and coordination within the platoon. Remember to consider the decisions included in the tasks.

OCCUPY SUPPRESSIVE FIRE POSITION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE COMMAND, CONTROL, COMMUNICATION, AND COORDINATION				
	None	Small	Moderate	Large	Extreme
1. Directs movement to over-watch position	_____	_____	_____	_____	_____
2. Directs enemy be engaged	_____	_____	_____	_____	_____
3. Requests SPOTREPS	_____	_____	_____	_____	_____
4. Requests indirect fires	_____	_____	_____	_____	_____
5. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
6. Submits SITREP	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Action on Contact described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the survivability of men and equipment within the platoon. How well he performed other tasks may have had a large effect on the survivability of men and equipment within the platoon.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the survivability of men and equipment within the platoon. Remember to consider the decisions included in the tasks.

IMMEDIATE ACTION

EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
1. Directs smoke be popped	_____	_____	_____	_____	_____
2. Directs movement into defilade position	_____	_____	_____	_____	_____
3. Submits SPOTREP	_____	_____	_____	_____	_____
4. Directs enemy be engaged	_____	_____	_____	_____	_____
5. Requests indirect fires	_____	_____	_____	_____	_____
6. Requests indirect fires be shifted	_____	_____	_____	_____	_____

DEVELOP THE SITUATION

EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
1. Requests SPOTREPS	_____	_____	_____	_____	_____
2. Develops the situation	_____	_____	_____	_____	_____
3. Submits SITREP	_____	_____	_____	_____	_____

The following tasks were performed by the platoon leader of the second platoon during the Action on Contact described in the scenario. Please rate them according to how much of an effect their performance could have had on the survivability of men and equipment within the platoon. Remember to consider the decisions included in the tasks.

OCCUPY SUPPRESSIVE FIRE POSITION

PLATOON LEADER TASK	EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT				
	None	Small	Moderate	Large	Extreme
1. Directs movement to over-watch position	_____	_____	_____	_____	_____
2. Directs enemy be engaged	_____	_____	_____	_____	_____
3. Requests SPOTREPS	_____	_____	_____	_____	_____
4. Requests indirect fires	_____	_____	_____	_____	_____
5. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
6. Submits SITREP	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Action on Contact described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the capability of the platoon to sustain its combat effectiveness. How he performed other tasks may have had a large effect on the capability of the platoon to sustain its combat effectiveness.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the capability of the platoon to sustain its combat effectiveness. Remember to consider the decisions included in the tasks.

IMMEDIATE ACTION

PLATOON LEADER TASK	EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS				
	None	Small	Moderate	Large	Extreme
1. Directs smoke be popped	_____	_____	_____	_____	_____
2. Directs movement into defilade position	_____	_____	_____	_____	_____
3. Submits SPOTREP	_____	_____	_____	_____	_____
4. Directs enemy be engaged	_____	_____	_____	_____	_____
5. Requests indirect fires	_____	_____	_____	_____	_____
6. Requests indirect fires be shifted	_____	_____	_____	_____	_____

DEVELOP THE SITUATION

PLATOON LEADER TASK	EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS				
	None	Small	Moderate	Large	Extreme
1. Requests SPOTREPS	_____	_____	_____	_____	_____
2. Develops the situation	_____	_____	_____	_____	_____
3. Submits SITREP	_____	_____	_____	_____	_____

The following tasks were performed by the platoon leader of the second platoon during the Action on Contact described in the scenario. Please rate them according to how much of an effect their performance could have had on the capability of the platoon to sustain its combat effectiveness. Remember to consider the decisions included in the tasks.

OCCUPY SUPPRESSIVE FIRE POSITION

PLATOON LEADER TASK	EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS				
	None	Small	Moderate	Large	Extreme
1. Directs movement to over-watch position	_____	_____	_____	_____	_____
2. Directs enemy be engaged	_____	_____	_____	_____	_____
3. Requests SPOTREPS	_____	_____	_____	_____	_____
4. Requests indirect fires	_____	_____	_____	_____	_____
5. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
6. Submits SITREP	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Action on Contact described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the successful accomplishment of the team mission. How he performed other tasks may have had a large effect on the successful accomplishment of the team mission.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the successful accomplishment of the team mission. Remember to consider the decisions included in the tasks.

IMMEDIATE ACTION

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
1. Directs smoke be popped	_____	_____	_____	_____	_____
2. Directs movement into defilade position	_____	_____	_____	_____	_____
3. Submits SPOTREP	_____	_____	_____	_____	_____
4. Directs enemy be engaged	_____	_____	_____	_____	_____
5. Requests indirect fires	_____	_____	_____	_____	_____
6. Requests indirect fires be shifted	_____	_____	_____	_____	_____

DEVELOP THE SITUATION

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
1. Requests SPOTREPS	_____	_____	_____	_____	_____
2. Develops the situation	_____	_____	_____	_____	_____
3. Submits SITREP	_____	_____	_____	_____	_____

The following tasks were performed by the platoon leader of the second platoon during the Action on Contact described in the scenario. Please rate them according to how much of an effect their performance could have had on the successful accomplishment of the team mission. Remember to consider the decisions included in the tasks.

OCCUPY SUPPRESSIVE FIRE POSITION

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
1. Directs movement to over-watch position	_____	_____	_____	_____	_____
2. Directs enemy be engaged	_____	_____	_____	_____	_____
3. Requests SPOTREPS	_____	_____	_____	_____	_____
4. Requests indirect fires	_____	_____	_____	_____	_____
5. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
6. Submits SITREP	_____	_____	_____	_____	_____

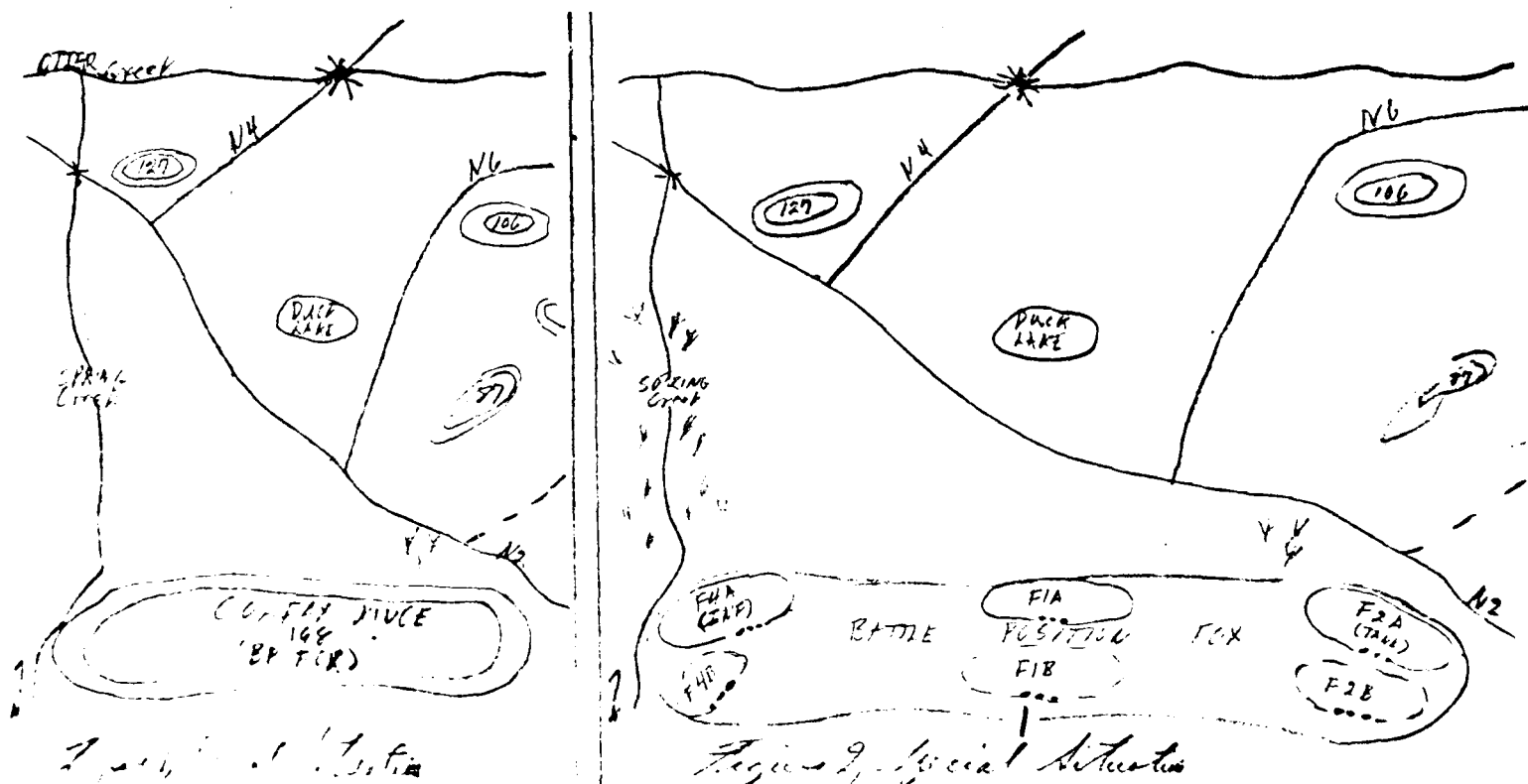
SCENARIO

OCCUPY BATTLE POSITION

OCCUPY AND ORGANIZE PLATOON BATTLE POSITION

1. General Situation (Figure 1). A/2/37 Armor, consisting of two tank platoons, one infantry platoon, and one TOW section, arrives at COLFAX RIDGE (BP FOX) with the mission to occupy and defend the BP. Enemy reconnaissance units are operating East of OTTER Creek. To reach BP FOX the enemy must cross OTTER Creek, a difficult but fordable obstacle, and then cross terrain which provides cover but very little concealment. Enemy avenues of approach are: Highway N6, directly into the BP; Highway N2, diagonally across the front of the BP; and the SPRING Creek woodland, directly into the left quarter of the BP. COLFAX Ridge is the key terrain. Visibility is 5000 meters and the ground will support all track vehicles. A FIST is on the BP and the team commander has outposted Hills 127 and 106.

2. Special Situation (Figure 2). The first platoon's mission is to occupy and defend BP FIA. The platoon leader directs his platoon into the BP; directs the TCs to position their tanks to cover the main avenue of approach; and to occupy turret defilade positions, camouflage the tanks, and post ground and air guards.



3. Special Situation Continued (Figure 3). The first platoon leader designates sectors of fire and tank targets; checks positions for suitability, and directs movement of tanks for good fields of fire; he assigns alternate positions, directs range cards be prepared, and chemical alarms set up; he then orders obstacles, mines and flares be installed. Next he coordinates with the FIST leader, the TOW section leader, and adjacent platoon leaders, and then completes his platoon fire plan. After completing the fire plan, the platoon leader reconnoiters the assigned alternate position, selects and announces withdrawal routes, and plans displacement. Lastly he requests the team fire plans and that wire communications be installed.

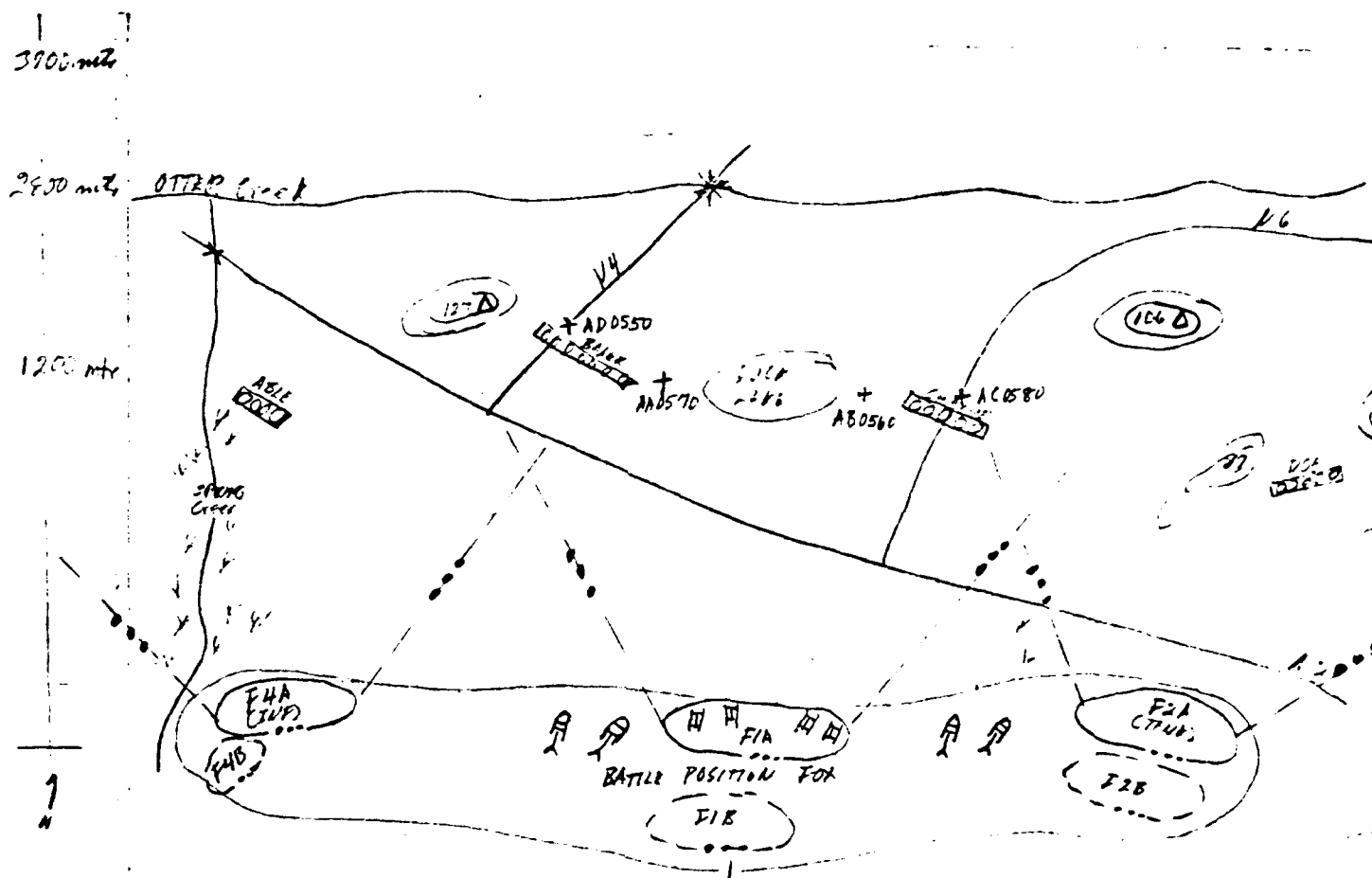


Figure 3. Special Situation Continued

Listed below are the tasks performed by the platoon leader of the first platoon during the Occupation of the Battle Position described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the effective application of fire power by the platoon. How he performed other tasks may have had a large effect on the effective application of fire power by the platoon.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the effective application of fire power by the platoon. Remember to consider the decisions included in the task.

OCCUPY PLATOON BATTLE POSITION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER				
	None	Small	Moderate	Large	Extreme
1. Directs movement into designated position	_____	_____	_____	_____	_____
2. Directs avenues of approach be covered	_____	_____	_____	_____	_____
3. Directs tanks be put in turret defilade	_____	_____	_____	_____	_____
4. Directs tanks be camouflaged	_____	_____	_____	_____	_____
5. Directs ground guards be posted	_____	_____	_____	_____	_____
6. Directs air guards be posted	_____	_____	_____	_____	_____

ORGANIZE PLATOON BATTLE POSITION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER				
	None	Small	Moderate	Large	Extreme
1. Designates sectors of fire	_____	_____	_____	_____	_____
2. Designates tank targets	_____	_____	_____	_____	_____
3. Checks positions for suitability	_____	_____	_____	_____	_____
4. Directs tanks move to good fields of fire	_____	_____	_____	_____	_____

EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
5. Assigns alternate positions	_____	_____	_____	_____	_____
6. Directs range cards be prepared	_____	_____	_____	_____	_____
7. Directs chemical alarms be emplaced	_____	_____	_____	_____	_____
8. Directs obstacles, mines, and flares be installed	_____	_____	_____	_____	_____
9. Coordinates with FIST leader	_____	_____	_____	_____	_____
10. Coordinates with TOW section leader	_____	_____	_____	_____	_____
11. Coordinates with adjacent platoon leaders	_____	_____	_____	_____	_____
12. Prepares a fire plan	_____	_____	_____	_____	_____
13. Reconnoiters assigned alternate position	_____	_____	_____	_____	_____
14. Selects and announces withdrawal routes	_____	_____	_____	_____	_____
15. Plans displacement	_____	_____	_____	_____	_____
16. Requests team fire plan	_____	_____	_____	_____	_____
17. Requests wire communications be installed	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Occupation of the Battle Position described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the effective use of mobility and maneuver by the platoon. How he performed other tasks may have had a large effect on the effective use of mobility and maneuver by the platoon.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the effective use of mobility and maneuver by the platoon. Remember to consider the decisions included in the tasks.

OCCUPY PLATOON BATTLE POSITION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE USE OF MOBILITY AND MANEUVER				
	None	Small	Moderate	Large	Extreme
1. Directs movement into designated position	_____	_____	_____	_____	_____
2. Directs avenues of approach be covered	_____	_____	_____	_____	_____
3. Directs tanks be put in turret defilade	_____	_____	_____	_____	_____
4. Directs tanks be camouflaged	_____	_____	_____	_____	_____
5. Directs ground guards be posted	_____	_____	_____	_____	_____
6. Directs air guards be posted	_____	_____	_____	_____	_____

ORGANIZE PLATOON BATTLE POSITION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE USE OF MOBILITY OF MANEUVER				
	None	Small	Moderate	Large	Extreme
1. Designates sectors of fire	_____	_____	_____	_____	_____
2. Designates tank targets	_____	_____	_____	_____	_____
3. Checks positions for suitability	_____	_____	_____	_____	_____
4. Directs tanks move to good fields of fire	_____	_____	_____	_____	_____

EFFECT ON EFFECTIVE USE OF MOBILITY AND MANEUVER

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
5. Assigns alternate positions	_____	_____	_____	_____	_____
6. Directs range cards be prepared	_____	_____	_____	_____	_____
7. Directs chemical alarms be emplaced	_____	_____	_____	_____	_____
8. Directs obstacles, mines, and flares be installed	_____	_____	_____	_____	_____
9. Coordinates with FIST leader	_____	_____	_____	_____	_____
10. Coordinates with TOW section leader	_____	_____	_____	_____	_____
11. Coordinates with adjacent platoon leaders	_____	_____	_____	_____	_____
12. Prepares a fire plan	_____	_____	_____	_____	_____
13. Reconnoiters assigned alternate position	_____	_____	_____	_____	_____
14. Selects and announces withdrawal routes	_____	_____	_____	_____	_____
15. Plans displacement	_____	_____	_____	_____	_____
16. Requests team fire plan	_____	_____	_____	_____	_____
17. Requests wire communications be installed	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Occupation of the Battle Position described in the scenario. How he performed some of these tasks may have had no effect whatsoever on effective command, control, communication, and coordination within the platoon. How he performed other tasks may have had a large effect on effective command, control, communication, and coordination within the platoon.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on effective command, control, communication, and coordination within the platoon. Remember to consider the decisions included in the tasks.

OCCUPY PLATOON BATTLE POSITION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE COMMAND, CONTROL, COMMUNICATION, AND COORDINATION				
	None	Small	Moderate	Large	Extreme
1. Directs movement into designated position	_____	_____	_____	_____	_____
2. Directs avenues of approach be covered	_____	_____	_____	_____	_____
3. Directs tanks be put in turret defilade	_____	_____	_____	_____	_____
4. Directs tanks be camouflaged	_____	_____	_____	_____	_____
5. Directs ground guards be posted	_____	_____	_____	_____	_____
6. Directs air guards be posted	_____	_____	_____	_____	_____

ORGANIZE PLATOON BATTLE POSITION

PLATOON LEADER TASK	EFFECT ON EFFECTIVE COMMAND, CONTROL, COMMUNICATION, AND COORDINATION				
	None	Small	Moderate	Large	Extreme
1. Designates sectors of fire	_____	_____	_____	_____	_____
2. Designates tank targets	_____	_____	_____	_____	_____
3. Checks positions for suitability	_____	_____	_____	_____	_____

EFFECT ON EFFECTIVE COMMAND, CONTROL,
COMMUNICATION, AND COORDINATION

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
4. Directs tanks move to good fields of fire	_____	_____	_____	_____	_____
5. Assigns alternate positions	_____	_____	_____	_____	_____
6. Directs range cards be prepared	_____	_____	_____	_____	_____
7. Directs chemical alarms be emplaced	_____	_____	_____	_____	_____
8. Directs obstacles, mines, and flares be installed	_____	_____	_____	_____	_____
9. Coordinates with FIST leader	_____	_____	_____	_____	_____
10. Coordinates with TOW section leader	_____	_____	_____	_____	_____
11. Coordinates with adjacent platoon leaders	_____	_____	_____	_____	_____
12. Prepares a fire plan	_____	_____	_____	_____	_____
13. Reconnoiters assigned alternate position	_____	_____	_____	_____	_____
14. Selects and announces withdrawal routes	_____	_____	_____	_____	_____
15. Plans displacement	_____	_____	_____	_____	_____
16. Requests team fire plan	_____	_____	_____	_____	_____
17. Requests wire communications be installed	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Occupation of the Battle Position described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the survivability of men and equipment within the platoon. How he performed other tasks may have had a large effect on the survivability of men and equipment within the platoon.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the survivability of men and equipment within the platoon. Remember to consider the decisions included in the tasks.

OCCUPY PLATOON BATTLE POSITION

PLATOON LEADER TASK	EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT				
	None	Small	Moderate	Large	Extreme
1. Directs movement into designated position	_____	_____	_____	_____	_____
2. Directs avenues of approach be covered	_____	_____	_____	_____	_____
3. Directs tanks be put in turret defilade	_____	_____	_____	_____	_____
4. Directs tanks be camouflaged	_____	_____	_____	_____	_____
5. Directs ground guards be posted	_____	_____	_____	_____	_____
6. Directs air guards be posted	_____	_____	_____	_____	_____

ORGANIZE PLATOON BATTLE POSITION

PLATOON LEADER TASK	EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT				
	None	Small	Moderate	Large	Extreme
1. Designates sectors of fire	_____	_____	_____	_____	_____
2. Designates tank targets	_____	_____	_____	_____	_____
3. Checks positions for suitability	_____	_____	_____	_____	_____
4. Directs tanks move to good fields of fire	_____	_____	_____	_____	_____

EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
5. Assigns alternate positions	_____	_____	_____	_____	_____
6. Directs range cards be prepared	_____	_____	_____	_____	_____
7. Directs chemical alarms be emplaced	_____	_____	_____	_____	_____
8. Directs obstacles, mines, and flares be installed	_____	_____	_____	_____	_____
9. Coordinates with FIST leader	_____	_____	_____	_____	_____
10. Coordinates with TOW section leader	_____	_____	_____	_____	_____
11. Coordinates with adjacent platoon leaders	_____	_____	_____	_____	_____
12. Prepares a fire plan	_____	_____	_____	_____	_____
13. Reconnoiters assigned alternate position	_____	_____	_____	_____	_____
14. Selects and announces withdrawal routes	_____	_____	_____	_____	_____
15. Plans displacement	_____	_____	_____	_____	_____
16. Requests team fire plan	_____	_____	_____	_____	_____
17. Requests wire communications be installed	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Occupation of the Battle Position described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the capability of the platoon to sustain its combat effectiveness. How he performed other tasks may have had a large effect on the capability of the platoon to sustain its combat effectiveness.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the capability of the platoon to sustain its combat effectiveness. Remember to consider the decisions included in the tasks.

OCCUPY PLATOON BATTLE POSITION

PLATOON LEADER TASK	EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS				
	None	Small	Moderate	Large	Extreme
1. Directs movement into designated position	_____	_____	_____	_____	_____
2. Directs avenues of approach be covered	_____	_____	_____	_____	_____
3. Directs tanks be put in turret defilade	_____	_____	_____	_____	_____
4. Directs tanks be camouflaged	_____	_____	_____	_____	_____
5. Directs ground guards be posted	_____	_____	_____	_____	_____
6. Directs air guards be posted	_____	_____	_____	_____	_____

ORGANIZE PLATOON BATTLE POSITION

PLATOON LEADER TASK	EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS				
	None	Small	Moderate	Large	Extreme
1. Designates sectors of fire	_____	_____	_____	_____	_____
2. Designates tank targets	_____	_____	_____	_____	_____
3. Checks positions for suitability	_____	_____	_____	_____	_____
4. Directs tanks move to good fields of fire	_____	_____	_____	_____	_____

EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
5. Assigns alternate positions	_____	_____	_____	_____	_____
6. Directs range cards be prepared	_____	_____	_____	_____	_____
7. Directs chemical alarms be emplaced	_____	_____	_____	_____	_____
8. Directs obstacles, mines, and flares be installed	_____	_____	_____	_____	_____
9. Coordinates with FIST leader	_____	_____	_____	_____	_____
10. Coordinates with TOW section leader	_____	_____	_____	_____	_____
11. Coordinates with adjacent platoon leaders	_____	_____	_____	_____	_____
12. Prepares a fire plan	_____	_____	_____	_____	_____
13. Reconnoiters assigned alternate position	_____	_____	_____	_____	_____
14. Selects and announces withdrawal routes	_____	_____	_____	_____	_____
15. Plans displacement	_____	_____	_____	_____	_____
16. Requests team fire plan	_____	_____	_____	_____	_____
17. Requests wire communications be installed	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Occupation of the Battle Position described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the successful accomplishment of the team mission. How he performed other tasks may have had a large effect on the successful accomplishment of the team mission.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the successful accomplishment of the team mission. Remember to consider the decisions included in the tasks.

OCCUPY PLATOON BATTLE POSITION

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
1. Directs movement into designated position	_____	_____	_____	_____	_____
2. Directs avenues of approach be covered	_____	_____	_____	_____	_____
3. Directs tanks be put in turret defilade	_____	_____	_____	_____	_____
4. Directs tanks be camouflaged	_____	_____	_____	_____	_____
5. Directs ground guards be posted	_____	_____	_____	_____	_____
6. Directs air guards be posted	_____	_____	_____	_____	_____

ORGANIZE PLATOON BATTLE POSITION

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
1. Designates sectors of fire	_____	_____	_____	_____	_____
2. Designates tank targets	_____	_____	_____	_____	_____
3. Checks positions for suitability	_____	_____	_____	_____	_____
4. Directs tanks move to good fields of fire	_____	_____	_____	_____	_____

EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
5. Assigns alternate positions	_____	_____	_____	_____	_____
6. Directs range cards be prepared	_____	_____	_____	_____	_____
7. Directs chemical alarms be emplaced	_____	_____	_____	_____	_____
8. Directs obstacles, mines, and flares be installed	_____	_____	_____	_____	_____
9. Coordinates with FIST leader	_____	_____	_____	_____	_____
10. Coordinates with TOW section leader	_____	_____	_____	_____	_____
11. Coordinates with adjacent platoon leaders	_____	_____	_____	_____	_____
12. Prepares a fire plan	_____	_____	_____	_____	_____
13. Reconnoiters assigned alternate position	_____	_____	_____	_____	_____
14. Selects and announces withdrawal routes	_____	_____	_____	_____	_____
15. Plans displacement	_____	_____	_____	_____	_____
16. Requests team fire plan	_____	_____	_____	_____	_____
17. Requests wire communications be installed	_____	_____	_____	_____	_____

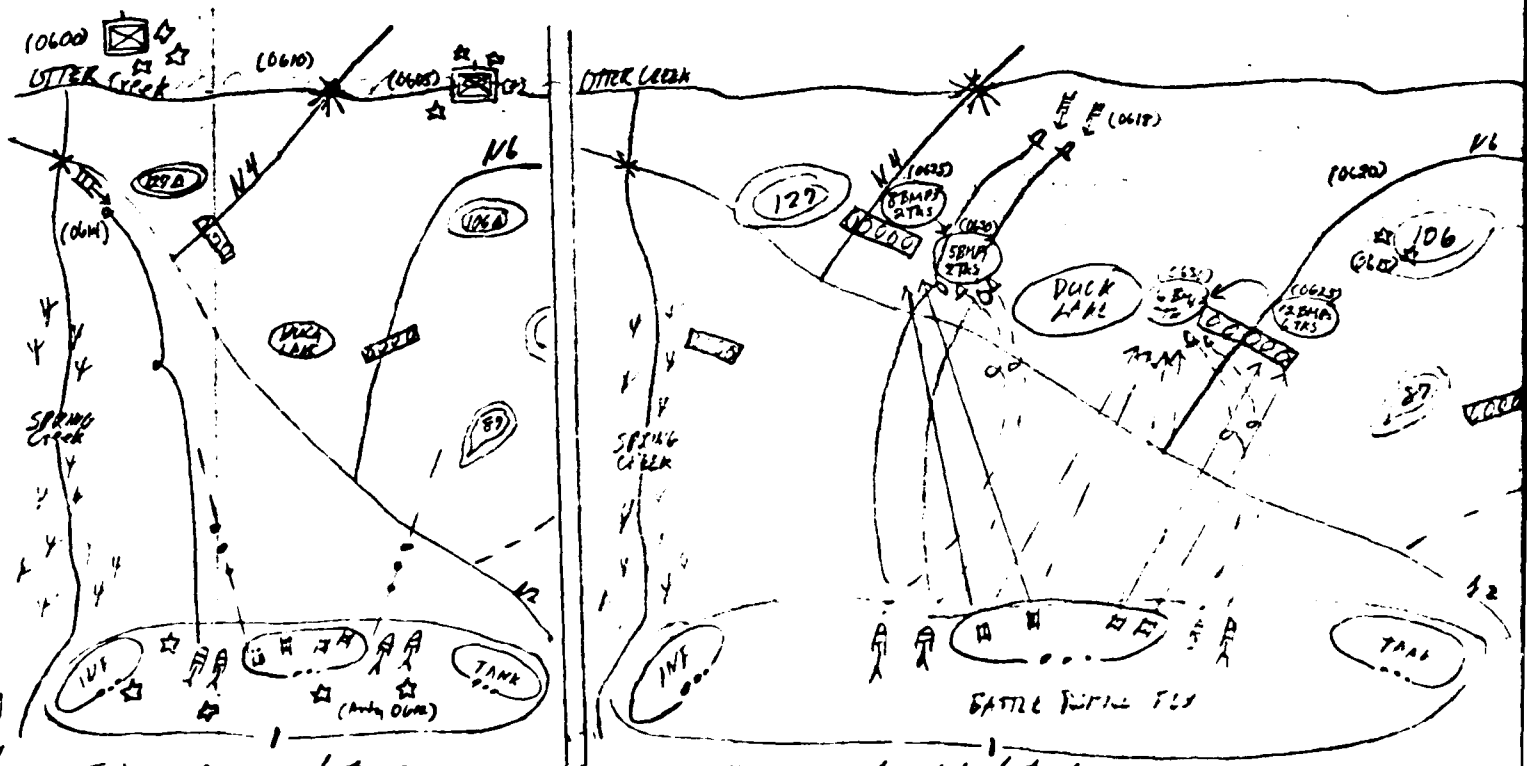
SCENARIO

DEFEND BATTLE POSITION

DEFEND PLATOON BATTLE POSITION

1. General Situation (Figure 1). At 0600 hours (BMNT) 1/A/2/37 Armo receives a report from OP127 that 6 BMPs and 2 tanks are moving south toward OTTER Creek, FIST engages. At 0605 hours OP106 reports 9 E.P.s and 3 tanks crossing OTTER Creek, FIST engages. At 0610 hours both OPs report enemy crossing OTTER Creek in force and under cover of smoke, FIST engages, team commander orders OPs to displace to SPRING Creek and Hill 87, at 0612 hours 10 rounds enemy artillery falls on BP FOX, team commander orders MOPP 3. At 0614 hours TOW engages BMP crossing SPRING Creek on Highway N2.

2. Special Situation (Figure 2). At 0530 hours first platoon leader requests artillery illumination of OTTER Creek crossings and team patrol reports: illumination negative, patrol reports indicate enemy engineers working around destroyed OTTER Creek bridge. At 0615 hours the platoon notices activity around Hill 106 and requests indirect fire on Hill 106. At 0618 hours he sees 2 BMPs 800 meters north of DUCK LAKE, he points out the targets to the left TOW section, monitors their fire, and submits SPOTREP. At 0620 hours the enemy lays a smoke screen between Hill 127 and Hill 106, the platoon leader directs targets be engaged with TIS (Thermal Image Sights). Sporadic enemy artillery falls on BP FOX. At 0625 hours 8 BMP and 2 tanks encounter minefield BAKER and another force of 12 BMPs and 6 tanks encounter minefield CHARLIE. The platoon leader orders the platoon sergeant to engage the left force while his section engages the right force; he also requests artillery concentrations AD0550 and AC0550. At 0630 hours 4 BMPs and 2 tanks emerge from the smoke at the gap between minefield BAKER and DUCK LAKE, another 6 BMP and 3 tanks emerge from the smoke at the gap between DUCK LAKE and minefield CHARLIE. The platoon leader directs the entire platoon to engage the right enemy force, asks the right TOW section to reinforce his fire, and the left TOW section to engage the left enemy force. The platoon leader then submits SITREP.



Listed below are the tasks performed by the platoon leader of the first platoon during the Battle Position Defense described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the effective application of fire power by the platoon. How he performed other tasks may have had a large effect on the effective application of fire power by the platoon.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the effective application fire power by the platoon. Remember to consider the decisions included in the task.

MAINTAIN SURVEILLANCE IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER				
	None	Small	Moderate	Large	Extreme
1. Requests illumination	_____	_____	_____	_____	_____
2. Requests team patrol reports	_____	_____	_____	_____	_____

INITIATE INDIRECT FIRES IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER				
	None	Small	Moderate	Large	Extreme
1. Requests indirect fires	_____	_____	_____	_____	_____
2. Requests indirect fires be adjusted	_____	_____	_____	_____	_____

INITIATE DIRECT FIRES IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER				
	None	Small	Moderate	Large	Extreme
1. Designates targets to TOW section	_____	_____	_____	_____	_____
2. Monitors TOWs	_____	_____	_____	_____	_____
3. Submits SPOTREP	_____	_____	_____	_____	_____

EFFECT ON EFFECTIVE APPLICATION OF FIRE POWER

PLATOON LEADER TASK

None Small Moderate Large Extreme

4. Directs targets be engaged
with TIS

5. Directs enemy be engaged

6. Requests indirect fires

7. Requests indirect fires
be adjusted

8. Requests TOW section
reinforce platoon fire

9. Submits SITREP

Listed below are the tasks performed by the platoon leader of the first platoon during the Battle Position Defense described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the effective use of mobility and maneuver by the platoon. How he performed other tasks may have had a large effect on the effective use of mobility and maneuver by the platoon.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the effective use of mobility and maneuver by the platoon. Remember to consider the decisions included in the tasks.

MAINTAIN SURVEILLANCE IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON EFFECTIVE USE OF MOBILITY AND MANEUVER				
	None	Small	Moderate	Large	Extreme
1. Requests illumination	_____	_____	_____	_____	_____
2. Requests team patrol reports	_____	_____	_____	_____	_____

INITIATE INDIRECT FIRES IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON EFFECTIVE USE OF MOBILITY AND MANEUVER				
	None	Small	Moderate	Large	Extreme
1. Requests indirect fires	_____	_____	_____	_____	_____
2. Requests indirect fires be adjusted	_____	_____	_____	_____	_____

INITIATE DIRECT FIRES IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON EFFECTIVE USE OF MOBILITY AND MANEUVER				
	None	Small	Moderate	Large	Extreme
1. Designates targets to TOW section	_____	_____	_____	_____	_____
2. Monitors TOWs	_____	_____	_____	_____	_____
3. Submits SPOTREP	_____	_____	_____	_____	_____

EFFECT ON EFFECTIVE USE OF MOBILITY AND MANEUVER

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
4. Directs targets be engaged with TIS	_____	_____	_____	_____	_____
5. Directs enemy be engaged	_____	_____	_____	_____	_____
6. Requests indirect fires	_____	_____	_____	_____	_____
7. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
8. Requests TOW section reinforce platoon fire	_____	_____	_____	_____	_____
9. Submits SITREP	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Battle Position Defense described in the scenario. How he performed some of these tasks may have had no effect whatsoever on effective command, control, communication, and coordination within the platoon. How he performed other tasks may have had a large effect on effective command, control, communication, and coordination within the platoon.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on effective command, control, communication, and coordination within the platoon. Remember to consider the decisions included in the tasks.

MAINTAIN SURVEILLANCE IN PLATOON SECTOR

EFFECT OF EFFECTIVE COMMAND, CONTROL, COMMUNICATION, AND COORDINATION

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
1. Requests illumination	_____	_____	_____	_____	_____
2. Requests team patrol reports	_____	_____	_____	_____	_____

INITIATE INDIRECT FIRES IN PLATOON SECTOR

EFFECT ON EFFECTIVE COMMAND, CONTROL, COMMUNICATION, AND COORDINATION

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
1. Requests indirect fires	_____	_____	_____	_____	_____
2. Requests indirect fires be adjusted	_____	_____	_____	_____	_____

INITIATE DIRECT FIRES IN PLATOON SECTOR

EFFECT ON EFFECTIVE COMMAND, CONTROL, COMMUNICATION, AND COORDINATION

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
1. Designates targets to TOW section	_____	_____	_____	_____	_____

EFFECT ON EFFECTIVE COMMAND, CONTROL,
COMMUNICATION, AND COORDINATION

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
2. Monitors TOWs	_____	_____	_____	_____	_____
3. Submits SPOTREP	_____	_____	_____	_____	_____
4. Directs targets be engaged with TIS	_____	_____	_____	_____	_____
5. Directs enemy be engaged	_____	_____	_____	_____	_____
6. Requests indirect fires	_____	_____	_____	_____	_____
7. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
8. Requests TOW section reinforce platoon fire	_____	_____	_____	_____	_____
9. Submits SITREP	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Battle Position Defense described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the survivability of men and equipment within the platoon. How he performed other tasks may have had a large effect on the survivability of men and equipment within the platoon.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the survivability of men and equipment within the platoon. Remember to consider the decisions included in the tasks.

MAINTAIN SURVEILLANCE IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT				
	None	Small	Moderate	Large	Extreme
1. Requests illumination	_____	_____	_____	_____	_____
2. Requests team patrol reports	_____	_____	_____	_____	_____

INITIATE INDIRECT FIRES IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT				
	None	Small	Moderate	Large	Extreme
1. Requests indirect fires	_____	_____	_____	_____	_____
2. Requests indirect fires be adjusted	_____	_____	_____	_____	_____

INITIATE DIRECT FIRES IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT				
	None	Small	Moderate	Large	Extreme
1. Designates targets to TOW section	_____	_____	_____	_____	_____
2. Monitors TOWs	_____	_____	_____	_____	_____
3. Submits SPOTREP	_____	_____	_____	_____	_____

EFFECT ON THE SURVIVABILITY OF MEN AND EQUIPMENT

PLATOON LEADER TASK

None

Small

Moderate

Large

Extreme

4. Directs targets be engaged
with TIS

5. Directs enemy be engaged

6. Requests indirect fires

7. Requests indirect fires
be adjusted

8. Requests TOW section
reinforce platoon fire

9. Submits SITREP

Listed below are the tasks performed by the platoon leader of the first platoon during the Battle Position Defense described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the capability of the platoon to sustain its combat effectiveness. How he performed other tasks may have had a large effect on the capability of the platoon to sustain its combat effectiveness.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effective their performance could have had on the capability of the platoon to sustain its combat effectiveness. Remember to consider the decisions included in the tasks.

MAINTAIN SURVEILLANCE IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS				
	None	Small	Moderate	Large	Extreme
1. Requests illumination	_____	_____	_____	_____	_____
2. Requests team patrol reports	_____	_____	_____	_____	_____

INITIATE INDIRECT FIRES IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS				
	None	Small	Moderate	Large	Extreme
1. Requests indirect fires	_____	_____	_____	_____	_____
2. Requests indirect fires be adjusted	_____	_____	_____	_____	_____

INITIATE DIRECT FIRES IN PLATOON SECTION

PLATOON LEADER TASK	EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS				
	None	Small	Moderate	Large	Extreme
1. Designates targets to TOW section	_____	_____	_____	_____	_____
2. Monitors TOWs	_____	_____	_____	_____	_____
3. Submits SPOTREP	_____	_____	_____	_____	_____

EFFECT ON SUSTAINMENT OF COMBAT EFFECTIVENESS

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
4. Directs targets be engaged with TIS	_____	_____	_____	_____	_____
5. Directs enemy be engaged	_____	_____	_____	_____	_____
6. Requests indirect fires	_____	_____	_____	_____	_____
7. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
8. Requests TOW section reinforce platoon fire	_____	_____	_____	_____	_____
9. Submits SITREP	_____	_____	_____	_____	_____

Listed below are the tasks performed by the platoon leader of the first platoon during the Battle Position Defense described in the scenario. How he performed some of these tasks may have had no effect whatsoever on the successful accomplishment of the team mission. How he performed other tasks may have had a large effect on the successful accomplishment of the team mission.

Please rate the following tasks that were performed by the platoon leader of the first platoon according to how much of an effect their performance could have had on the successful accomplishment of the team mission. Remember to consider the decisions included in the tasks.

MAINTAIN SURVEILLANCE IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
1. Requests illumination	_____	_____	_____	_____	_____
2. Requests team patrol reports	_____	_____	_____	_____	_____

INITIATE INDIRECT FIRES IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
1. Requests indirect fires	_____	_____	_____	_____	_____
2. Requests indirect fires be adjusted	_____	_____	_____	_____	_____

INITIATE DIRECT FIRES IN PLATOON SECTOR

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
1. Designates targets to TOW section	_____	_____	_____	_____	_____
2. Monitors TOWs	_____	_____	_____	_____	_____
3. Submits SPOTREP	_____	_____	_____	_____	_____

EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION

PLATOON LEADER TASK

None Small Moderate Large Extreme

4. Directs targets be engaged
with TIS

5. Directs enemy be engaged

6. Requests indirect fires

7. Requests indirect fires
be adjusted

8. Requests TOW section
reinforce platoon fire

9. Submits SITREP

APPENDIX C

ISD-Based Questionnaire

NAME _____

DATE _____

BRANCH _____

PLATOON LEADER TASK SURVEY
FORM B

The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) and the Human Resources Research Organization (HumRRO) are developing a method for preparing training objectives for leadership tasks. The method will be used to prepare training objectives for critical platoon leader tasks performed during tank platoon operations.

Because of your experience in armor, you are asked to rate various platoon leader tasks along a number of different dimensions. The criticality of these tasks will be determined on the basis of these ratings, and training objectives will be prepared for the tasks found to be most critical.

The instructions inside this booklet will describe in detail how the ratings are to be made. If you have any questions, raise your hand and they will be answered.

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TECHNICAL DIRECTOR, ARMY RESEARCH INSTITUTE
FOR THE BEHAVIORAL AND SOCIAL SCIENCES
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR PERSONNEL

DEPARTMENT OF THE ARMY

INSTRUCTIONS

This questionnaire contains a list of tasks performed by the platoon leader of a tank platoon and four different rating scales. The rating scales are:

- 1) Amount of time required to learn the task
- 2) Amount of time available before performance of the task must begin
- 3) Amount of damage or injury that can result from how the task is performed
- 4) Effect of task performance on the successful accomplishment of the team mission

Your job will be to rate the tasks on each of the four scales. The instructions before each set of rating scales will describe how the scales are to be used.

Most platoon leader tasks include two components--decisions and actions. Although only the actions are stated in the list of tasks, you should consider both the decision and the action when you rate each task. For example, one of the tasks you will rate is "directs cease fire." Before a platoon leader can direct his platoon to cease fire, he must first decide to cease fire. Therefore when you rate this task, you must consider both the decision to cease fire and the command to cease fire.

Indicate your rating for each task by placing an "X" in the appropriate space.

Platoon leader tasks differ in the severity of the consequences resulting from their performance. How some platoon leader tasks are performed may result in no consequences whatsoever. How others are performed may result in destruction of equipment and/or loss of life.

Please rate the following platoon leader tasks according to the amount of damage to equipment and/or injury to personnel that can result from their performance by the platoon leader. Remember to consider the decisions that are included in the task.

AMOUNT OF EQUIPMENT DAMAGE AND/OR INJURY TO PERSONNEL

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
1. Analyzes OPORD	_____	_____	_____	_____	_____
2. Assigns alternate positions	_____	_____	_____	_____	_____
3. Awaits permission to bypass	_____	_____	_____	_____	_____
4. Awaits time or permission to attack	_____	_____	_____	_____	_____
5. Awaits time or permission to open fire	_____	_____	_____	_____	_____
6. Checks positions for suitability	_____	_____	_____	_____	_____
7. Chooses a course of action	_____	_____	_____	_____	_____
8. Clarifies mission	_____	_____	_____	_____	_____
9. Conducts necessary coordination	_____	_____	_____	_____	_____
10. Conducts reconnaissance	_____	_____	_____	_____	_____
11. Controls application of direct fire	_____	_____	_____	_____	_____
12. Controls interval between tanks	_____	_____	_____	_____	_____
13. Controls interval with lead platoon	_____	_____	_____	_____	_____
14. Controls speed of tanks	_____	_____	_____	_____	_____
15. Coordinates fire distribution	_____	_____	_____	_____	_____

AMOUNT OF EQUIPMENT DAMAGE AND/OR INJURY TO PERSONNEL

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
16. Coordinates indirect fires	_____	_____	_____	_____	_____
17. Coordinates tank sectors of fire	_____	_____	_____	_____	_____
18. Coordinates security of flanks with other team elements	_____	_____	_____	_____	_____
19. Coordinates with adjacent platoon leaders	_____	_____	_____	_____	_____
20. Coordinates with FIST leader	_____	_____	_____	_____	_____
21. Coordinates with TOW section leader	_____	_____	_____	_____	_____
22. Designates sectors of fire	_____	_____	_____	_____	_____
23. Designates tank targets	_____	_____	_____	_____	_____
24. Designates targets to forward observer	_____	_____	_____	_____	_____
25. Designates targets to TOW section	_____	_____	_____	_____	_____
26. Develops the situation	_____	_____	_____	_____	_____
27. Directs after operations maintenance be performed	_____	_____	_____	_____	_____
28. Directs air guards be kept alert	_____	_____	_____	_____	_____
29. Directs air guards be posted	_____	_____	_____	_____	_____
30. Directs alternate positions be prepared	_____	_____	_____	_____	_____
31. Directs appropriate movement	_____	_____	_____	_____	_____
32. Directs assault be started	_____	_____	_____	_____	_____

AMOUNT OF EQUIPMENT DAMAGE AND/OR INJURY TO PERSONNEL

PLATOON LEADER TASK	None	Small	Moderate	large	Extreme
33. Directs attack be conducted	_____	_____	_____	_____	_____
34. Directs avenues of approach be covered	_____	_____	_____	_____	_____
35. Directs battle position be prepared	_____	_____	_____	_____	_____
36. Directs battle readiness be maintained	_____	_____	_____	_____	_____
37. Directs bounding overwatch	_____	_____	_____	_____	_____
38. Directs bounding reverse overwatch	_____	_____	_____	_____	_____
39. Directs cease fire	_____	_____	_____	_____	_____
40. Directs chemical alarms be emplaced	_____	_____	_____	_____	_____
41. Directs coil formation	_____	_____	_____	_____	_____
42. Directs coil or herring-bone formation	_____	_____	_____	_____	_____
43. Directs communications be checked	_____	_____	_____	_____	_____
44. Directs covering fires be provided	_____	_____	_____	_____	_____
45. Directs covering fire position be held	_____	_____	_____	_____	_____
46. Directs critical points be crossed	_____	_____	_____	_____	_____
47. Directs defense of position	_____	_____	_____	_____	_____
48. Directs defensive position be prepared	_____	_____	_____	_____	_____
49. Directs displacement	_____	_____	_____	_____	_____
50. Directs emergency repairs be made	_____	_____	_____	_____	_____
51. Directs enemy be engaged	_____	_____	_____	_____	_____

AMOUNT OF EQUIPMENT DAMAGE AND/OR INJURY TO PERSONNEL

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
52. Directs enemy covering obstacles be engaged	_____	_____	_____	_____	_____
53. Directs enemy on objective be destroyed	_____	_____	_____	_____	_____
54. Directs fire and maneuver be conducted	_____	_____	_____	_____	_____
55. Directs fire be held	_____	_____	_____	_____	_____
56. Directs flank tanks be tied in with other team elements	_____	_____	_____	_____	_____
57. Directs ground gurards be posted	_____	_____	_____	_____	_____
58. Directs herringbone formation	_____	_____	_____	_____	_____
59. Directs holding of covering fire position	_____	_____	_____	_____	_____
60. Directs individual positions be prepared	_____	_____	_____	_____	_____
61. Directs line of departure be crossed	_____	_____	_____	_____	_____
62. Directs main guns be oriented	_____	_____	_____	_____	_____
63. Directs movement be initiated	_____	_____	_____	_____	_____
64. Directs movement into assault formation	_____	_____	_____	_____	_____
65. Directs movement into attack formation	_____	_____	_____	_____	_____
66. Directs movement into attack position	_____	_____	_____	_____	_____
67. Directs movement into defilade position	_____	_____	_____	_____	_____
68. Directs movement into designated position	_____	_____	_____	_____	_____

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AMOUNT OF EQUIPMENT DAMAGE AND/OR INJURY TO PERSONNEL

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
69. Directs movement into flank position	_____	_____	_____	_____	_____
70. Directs movement into overwatch position	_____	_____	_____	_____	_____
71. Directs movement into support position	_____	_____	_____	_____	_____
72. Directs movement into suppressive fire position	_____	_____	_____	_____	_____
73. Directs movement out of attack position	_____	_____	_____	_____	_____
74. Directs movement to flank	_____	_____	_____	_____	_____
75. Directs movement to occupy position to support breaching operation	_____	_____	_____	_____	_____
76. Directs movement to pass through breach	_____	_____	_____	_____	_____
77. Directs move out in previous formation	_____	_____	_____	_____	_____
78. Directs obstacles, mines, and flares be installed	_____	_____	_____	_____	_____
79. Directs open fire	_____	_____	_____	_____	_____
80. Directs passage of lines be conducted	_____	_____	_____	_____	_____
81. Directs phase lines be crossed	_____	_____	_____	_____	_____
82. Directs position be held	_____	_____	_____	_____	_____
83. Directs preparation for bypass	_____	_____	_____	_____	_____
84. Directs pre-fire checks be conducted	_____	_____	_____	_____	_____
85. Directs range cards be prepared	_____	_____	_____	_____	_____

AMOUNT OF EQUIPMENT DAMAGE AND/OR INJURY TO PERSONNEL

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
86. Directs readiness actions be performed	_____	_____	_____	_____	_____
87. Directs release point be crossed	_____	_____	_____	_____	_____
88. Directs resupply be performed	_____	_____	_____	_____	_____
89. Directs smoke be popped	_____	_____	_____	_____	_____
90. Directs specified movement	_____	_____	_____	_____	_____
91. Directs start point be crossed	_____	_____	_____	_____	_____
92. Directs successive delay position be occupied	_____	_____	_____	_____	_____
93. Directs supplies be distributed	_____	_____	_____	_____	_____
94. Directs suppressive fires	_____	_____	_____	_____	_____
95. Directs suppressive fires be shifted	_____	_____	_____	_____	_____
96. Directs suppressive fires on flank targets	_____	_____	_____	_____	_____
97. Directs surprise targets be engaged	_____	_____	_____	_____	_____
98. Directs surveillance be conducted	_____	_____	_____	_____	_____
99. Directs tanks be camouflaged	_____	_____	_____	_____	_____
100. Directs tanks be put in turret defilade	_____	_____	_____	_____	_____
101. Directs tanks move into firing position	_____	_____	_____	_____	_____
102. Directs tanks move to good fields of fire	_____	_____	_____	_____	_____

AMOUNT OF EQUIPMENT DAMAGE AND/OR INJURY TO PERSONNEL

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
103. Directs targets be engaged with TIS (Thermal Image System)	_____	_____	_____	_____	_____
104. Directs targets in assigned sector be engaged	_____	_____	_____	_____	_____
105. Directs targets of opportunity be engaged	_____	_____	_____	_____	_____
106. Directs team on battle position be joined	_____	_____	_____	_____	_____
107. Directs team on objective be joined	_____	_____	_____	_____	_____
108. Directs the attack be accelerated	_____	_____	_____	_____	_____
109. Directs 3-man crews be organized	_____	_____	_____	_____	_____
110. Directs traveling	_____	_____	_____	_____	_____
111. Directs traveling overwatch	_____	_____	_____	_____	_____
112. Directs traveling reverse overwatch	_____	_____	_____	_____	_____
113. Issues FRAGO	_____	_____	_____	_____	_____
114. Issues OPORD	_____	_____	_____	_____	_____
115. Issues warning order	_____	_____	_____	_____	_____
116. Makes an estimate of the situation	_____	_____	_____	_____	_____
117. Makes a tentative plan	_____	_____	_____	_____	_____
118. Monitors indirect fires	_____	_____	_____	_____	_____
119. Monitors TOW	_____	_____	_____	_____	_____
120. Plans displacement	_____	_____	_____	_____	_____
121. Prepares a fire plan	_____	_____	_____	_____	_____

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AMOUNT OF EQUIPMENT DAMAGE AND/OR INJURY TO PERSONNEL

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
122. Prepares an operation plan	_____	_____	_____	_____	_____
123. Provides target data to forward observer	_____	_____	_____	_____	_____
124. Reassesses tactical situation	_____	_____	_____	_____	_____
125. Reconnoiters assigned alternate position	_____	_____	_____	_____	_____
126. Reestablishes communications with TCs	_____	_____	_____	_____	_____
127. Reestablishes communications with the team	_____	_____	_____	_____	_____
128. Reports crossing phase lines	_____	_____	_____	_____	_____
129. Reports TOW effects	_____	_____	_____	_____	_____
130. Requests and adjusts preparatory fires	_____	_____	_____	_____	_____
131. Requests artillery fire and infantry support	_____	_____	_____	_____	_____
132. Requests Class I, III, and V supplies	_____	_____	_____	_____	_____
133. Requests direct covering fires	_____	_____	_____	_____	_____
134. Requests final protective fires	_____	_____	_____	_____	_____
135. Requests illumination	_____	_____	_____	_____	_____
136. Requests indirect final protective fires	_____	_____	_____	_____	_____
137. Requests indirect fires	_____	_____	_____	_____	_____
138. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
139. Requests indirect fires be shifted	_____	_____	_____	_____	_____

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AMOUNT OF EQUIPMENT DAMAGE AND/OR INJURY TO PERSONNEL

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
140. Requests indirect fires be stopped	_____	_____	_____	_____	_____
141. Requests permission to counterattack	_____	_____	_____	_____	_____
142. Requests permission to cover displacement	_____	_____	_____	_____	_____
143. Requests permission to displace	_____	_____	_____	_____	_____
144. Requests permission to fire and maneuver	_____	_____	_____	_____	_____
145. Requests permission to hold	_____	_____	_____	_____	_____
146. Requests permission to join team on battle position	_____	_____	_____	_____	_____
147. Requests permission to withdraw	_____	_____	_____	_____	_____
148. Requests readiness reports	_____	_____	_____	_____	_____
149. Requests SPOTREPS	_____	_____	_____	_____	_____
150. Requests supply status	_____	_____	_____	_____	_____
151. Requests suppressive fires	_____	_____	_____	_____	_____
152. Requests suppressive fires be shifted	_____	_____	_____	_____	_____
153. Requests suppressive fires be stopped	_____	_____	_____	_____	_____
154. Requests team fire plan	_____	_____	_____	_____	_____
155. Requests team patrol reports	_____	_____	_____	_____	_____
156. Requests TOWs open fire	_____	_____	_____	_____	_____
157. Requests TOW section reinforce platoon fire	_____	_____	_____	_____	_____
158. Requests wire communications be installed	_____	_____	_____	_____	_____

AMOUNT OF EQUIPMENT DAMAGE AND/OR INJURY TO PERSONNEL

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
159. Selects and announces withdrawal routes	_____	_____	_____	_____	_____
160. Submits SITREP	_____	_____	_____	_____	_____
161. Submits SPOTREP	_____	_____	_____	_____	_____

Platoon leader tasks differ in the amount of time required for learning. Some platoon leader tasks may be learned very quickly. Others require more time to be learned.

Please rate the following platoon leader tasks according to how much time would be required for learning by most new officers. Remember to consider the decisions included in the task.

PLATOON LEADER TASK	AMOUNT OF TIME REQUIRED FOR LEARNING				
	None	One Hour Or Less	Several Hours	One Day	Two Days Or More
1. Analyzes OPORD	_____	_____	_____	_____	_____
2. Assigns alternate positions	_____	_____	_____	_____	_____
3. Awaits permission to bypass	_____	_____	_____	_____	_____
4. Awaits time or permission to attack	_____	_____	_____	_____	_____
5. Awaits time or permission to open fire	_____	_____	_____	_____	_____
6. Checks positions for suitability	_____	_____	_____	_____	_____
7. Chooses a course of action	_____	_____	_____	_____	_____
8. Clarifies mission	_____	_____	_____	_____	_____
9. Conducts necessary coordination	_____	_____	_____	_____	_____
10. Conducts reconnaissance	_____	_____	_____	_____	_____
11. Controls application of direct fire	_____	_____	_____	_____	_____
12. Controls interval between tanks	_____	_____	_____	_____	_____
13. Controls interval with lead platoon	_____	_____	_____	_____	_____
14. Controls speed of tanks	_____	_____	_____	_____	_____
15. Coordinates fire distribution	_____	_____	_____	_____	_____
16. Coordinates indirect fires	_____	_____	_____	_____	_____

AMOUNT OF TIME REQUIRED FOR LEARNING

PLATOON LEADER TASK

	None	One Hour Or Less	Several Hours	One Day	Two Days Or More
17. Coordinates tank sectors of fire	_____	_____	_____	_____	_____
18. Coordinates security of flanks with other team elements	_____	_____	_____	_____	_____
19. Coordinates with adjacent platoon leaders	_____	_____	_____	_____	_____
20. Coordinates with FIST leader	_____	_____	_____	_____	_____
21. Coordinates with TOW section leader	_____	_____	_____	_____	_____
22. Designates sectors of fire	_____	_____	_____	_____	_____
23. Designates tank targets	_____	_____	_____	_____	_____
24. Designates targets to forward observer	_____	_____	_____	_____	_____
25. Designates targets to TOW section	_____	_____	_____	_____	_____
26. Develops the situation	_____	_____	_____	_____	_____
27. Directs after operations maintenance be performed	_____	_____	_____	_____	_____
28. Directs air guards be kept alert	_____	_____	_____	_____	_____
29. Directs air guards be posted	_____	_____	_____	_____	_____
30. Directs alternate positions be prepared	_____	_____	_____	_____	_____
31. Directs appropriate movement	_____	_____	_____	_____	_____
32. Directs assault be started	_____	_____	_____	_____	_____
33. Directs attack be conducted	_____	_____	_____	_____	_____
34. Directs avenues of approach be covered	_____	_____	_____	_____	_____

AMOUNT OF TIME REQUIRED FOR LEARNING

PLATOON LEADER TASK					
	None	One Hour Or Less	Several Hours	One Day	Two Days Or More
35. Directs battle position be prepared	_____	_____	_____	_____	_____
36. Directs battle readiness be maintained	_____	_____	_____	_____	_____
37. Directs bounding overwatch	_____	_____	_____	_____	_____
38. Directs bounding reverse overwatch	_____	_____	_____	_____	_____
39. Directs cease fire	_____	_____	_____	_____	_____
40. Directs chemical alarms be emplaced	_____	_____	_____	_____	_____
41. Directs coil formation	_____	_____	_____	_____	_____
42. Directs coil or herringbone formation	_____	_____	_____	_____	_____
43. Directs communications be checked	_____	_____	_____	_____	_____
44. Directs covering fires be provided	_____	_____	_____	_____	_____
45. Directs covering fire position be held	_____	_____	_____	_____	_____
46. Directs critical points be crossed	_____	_____	_____	_____	_____
47. Directs defense of position	_____	_____	_____	_____	_____
48. Directs defensive position be prepared	_____	_____	_____	_____	_____
49. Directs displacement	_____	_____	_____	_____	_____
50. Directs emergency repairs be made	_____	_____	_____	_____	_____
51. Directs enemy be engaged	_____	_____	_____	_____	_____
52. Directs enemy covering obstacles be engaged	_____	_____	_____	_____	_____

AMOUNT OF TIME REQUIRED FOR LEARNING

PLATOON LEADER TASK

	None	One Hour Or Less	Several Hours	One Day	Two Days Or More
53. Directs enemy on objective be destroyed	_____	_____	_____	_____	_____
54. Directs fire and maneuver be conducted	_____	_____	_____	_____	_____
55. Directs fire be held	_____	_____	_____	_____	_____
56. Directs flank tanks be tied in with other team elements	_____	_____	_____	_____	_____
57. Directs ground guards be posted	_____	_____	_____	_____	_____
58. Directs herringbone formation	_____	_____	_____	_____	_____
59. Directs holding of covering fire position	_____	_____	_____	_____	_____
60. Directs individual positions be prepared	_____	_____	_____	_____	_____
61. Directs line of departure be crossed	_____	_____	_____	_____	_____
62. Directs main guns be oriented	_____	_____	_____	_____	_____
63. Directs movement be initiated	_____	_____	_____	_____	_____
64. Directs movement into assault formation	_____	_____	_____	_____	_____
65. Directs movement into attack formation	_____	_____	_____	_____	_____
66. Directs movement into attack position	_____	_____	_____	_____	_____
67. Directs movement into defilade position	_____	_____	_____	_____	_____
68. Directs movement into designated position	_____	_____	_____	_____	_____
69. Directs movement into flank position	_____	_____	_____	_____	_____

AMOUNT OF TIME REQUIRED FOR LEARNING

PLATOON LEADER TASK

	None	One Hour Or Less	Several Hours	One Day	Two Days Or More
70. Directs movement into overwatch position	_____	_____	_____	_____	_____
71. Directs movement into support position	_____	_____	_____	_____	_____
72. Directs movement into suppressive fire position	_____	_____	_____	_____	_____
73. Directs movement out of attack position	_____	_____	_____	_____	_____
74. Directs movement to flank	_____	_____	_____	_____	_____
75. Directs movement to occupy position to support breach- ing operation	_____	_____	_____	_____	_____
76. Directs movement to pass through breach	_____	_____	_____	_____	_____
77. Directs move out in previous formation	_____	_____	_____	_____	_____
78. Directs obstacles, mines, and flares be installed	_____	_____	_____	_____	_____
79. Directs open fire	_____	_____	_____	_____	_____
80. Directs passage of lines be conducted	_____	_____	_____	_____	_____
81. Directs phase lines be crossed	_____	_____	_____	_____	_____
82. Directs position be held	_____	_____	_____	_____	_____
83. Directs preparation for bypass	_____	_____	_____	_____	_____
84. Directs pre-fire checks be conducted	_____	_____	_____	_____	_____
85. Directs range cards be prepared	_____	_____	_____	_____	_____

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AMOUNT OF TIME REQUIRED FOR LEARNING

PLATOON LEADER TASK					
	None	One Hour Or Less	Several Hours	One Day	Two Days Or More
86. Directs readiness actions be performed	_____	_____	_____	_____	_____
87. Directs release point be crossed	_____	_____	_____	_____	_____
88. Directs resupply be performed	_____	_____	_____	_____	_____
89. Directs smoke be popped	_____	_____	_____	_____	_____
90. Directs specified movement	_____	_____	_____	_____	_____
91. Directs start point be crossed	_____	_____	_____	_____	_____
92. Directs successive delay position be occupied	_____	_____	_____	_____	_____
93. Directs supplies be distributed	_____	_____	_____	_____	_____
94. Directs suppressive fires	_____	_____	_____	_____	_____
95. Directs suppressive fires be shifted	_____	_____	_____	_____	_____
96. Directs suppressive fires on flank targets	_____	_____	_____	_____	_____
97. Directs surprise targets be engaged	_____	_____	_____	_____	_____
98. Directs surveillance be continued	_____	_____	_____	_____	_____
99. Directs tanks be camouflaged	_____	_____	_____	_____	_____
100. Directs tanks be put in turret defilade	_____	_____	_____	_____	_____
101. Directs tanks move into firing position	_____	_____	_____	_____	_____
102. Directs tanks move to good fields of fire	_____	_____	_____	_____	_____
103. Directs targets be engaged with TIS (Thermal Image Sights)	_____	_____	_____	_____	_____

AMOUNT OF TIME REQUIRED FOR LEARNING

PLATOON LEADER TASK

	None	One Hour Or Less	Several Hours	One Day	Two Days Or More
104. Directs targets in assigned sector be engaged					
105. Directs targets of opportunity be engaged					
106. Directs team on battle position be joined					
107. Directs team on objective be joined					
108. Directs the attack be accelerated					
109. Directs 3-man crews be organized					
110. Directs traveling					
111. Directs traveling overwatch					
112. Directs traveling reverse overwatch					
113. Issues FRAGO					
114. Issues OPORD					
115. Issues warning order					
116. Makes an estimate of the situation					
117. Makes a tentative plan					
118. Monitors indirect fires					
119. Monitors TOWs					
120. Plans displacement					
121. Prepares a fire plan					
122. Prepares an operation plan					
123. Provides target data to forward observer					

AMOUNT OF TIME REQUIRED FOR LEARNING

PLATOON LEADER

	None	One Hour Or Less	Several Hours	One Day	Two Days Or More
124. Reassesses tactical situation					
125. Reconnoiters assigned alternate position					
126. Reestablishes communications with TCs					
127. Reestablishes communications with the team					
128. Reports crossing phase lines					
129. Reports TOW effects					
130. Requests and adjusts preparatory fires					
131. Requests artillery fire and infantry support					
132. Requests Class I, III, and V supplies					
133. Requests direct covering fires					
134. Requests final protective fires					
135. Requests illumination					
136. Requests indirect final protective fires					
137. Requests indirect fires					
138. Requests indirect fires be adjusted					
139. Requests indirect fires be shifted					
140. Requests indirect fires be stopped					
141. Requests permission to counterattack					

AMOUNT OF TIME REQUIRED FOR LEARNING

PLATOON LEADER

	None	One Hour Or Less	Several Hours	One Day	Two Days Or More
142. Requests permission to cover displacement					
143. Requests permission to displace					
144. Requests permission to fire and maneuver					
145. Requests permission to hold					
146. Requests permission to join team on battle position					
147. Requests permission to withdraw					
148. Requests readiness reports					
149. Requests SPOTREPS					
150. Requests supply status					
151. Requests suppressive fires					
152. Requests suppressive fires be shifted					
153. Requests suppressive fires be stopped					
154. Requests team fire plan					
155. Requests team patrol reports					
156. Requests TOWs open fire					
157. Requests TOW section rein- force platoon fire					
158. Requests wire communications be installed					
159. Selects and announces with- drawal routes					

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AMOUNT OF TIME REQUIRED FOR LEARNING

PLATOON LEADER TASK

None	One Hour Or Less	Several Hours	One Day	Two Days Or More
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160. Submits SITREP

_____	_____	_____	_____	_____
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161. Submits SPOTREP

_____	_____	_____	_____	_____
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Platoon leader tasks differ in their effects on mission accomplishment. How the platoon leader performs some tasks may have no effect whatsoever on the successful accomplishment of the team mission. How he performs other tasks may have a large effect on the successful accomplishment of the team mission.

Please rate the following platoon leader tasks according to how much of an effect their performance could have on the successful accomplishment of the team mission. Remember to consider the decisions included in the task.

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
1. Analyzes OPORD	_____	_____	_____	_____	_____
2. Assigns alternate positions	_____	_____	_____	_____	_____
3. Awaits permission to bypass	_____	_____	_____	_____	_____
4. Awaits time or permission to attack	_____	_____	_____	_____	_____
5. Awaits time or permission to open fire	_____	_____	_____	_____	_____
6. Checks positions for suitability	_____	_____	_____	_____	_____
7. Chooses a course of action	_____	_____	_____	_____	_____
8. Clarifies mission	_____	_____	_____	_____	_____
9. Conducts necessary coordination	_____	_____	_____	_____	_____
10. Conducts reconnaissance	_____	_____	_____	_____	_____
11. Controls application of direct fire	_____	_____	_____	_____	_____
12. Controls interval between tanks	_____	_____	_____	_____	_____
13. Controls interval with lead platoon	_____	_____	_____	_____	_____
14. Controls speed of tanks	_____	_____	_____	_____	_____

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
15. Coordinates fire distribution	_____	_____	_____	_____	_____
16. Coordinates indirect fires	_____	_____	_____	_____	_____
17. Coordinates tank sectors of fire	_____	_____	_____	_____	_____
18. Coordinates security of flanks with other team elements	_____	_____	_____	_____	_____
19. Coordinates with adjacent platoon leaders	_____	_____	_____	_____	_____
20. Coordinates with FIST leader	_____	_____	_____	_____	_____
21. Coordinates with TOW section leader	_____	_____	_____	_____	_____
22. Designates sectors of fire	_____	_____	_____	_____	_____
23. Designates tank targets	_____	_____	_____	_____	_____
24. Designates targets to forward observer	_____	_____	_____	_____	_____
25. Designates targets to TOW section	_____	_____	_____	_____	_____
26. Develops the situation	_____	_____	_____	_____	_____
27. Directs after operations maintenance be performed	_____	_____	_____	_____	_____
28. Directs air guards be kept alert	_____	_____	_____	_____	_____
29. Directs air guards be posted	_____	_____	_____	_____	_____
30. Directs alternate positions be prepared	_____	_____	_____	_____	_____
31. Directs appropriate movement	_____	_____	_____	_____	_____

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
32. Directs assault be started	_____	_____	_____	_____	_____
33. Directs attack be conducted	_____	_____	_____	_____	_____
34. Directs avenues of approach be covered	_____	_____	_____	_____	_____
35. Directs battle position be prepared	_____	_____	_____	_____	_____
36. Directs battle readiness be maintained	_____	_____	_____	_____	_____
37. Directs bounding overwatch	_____	_____	_____	_____	_____
38. Directs bounding reverse overwatch	_____	_____	_____	_____	_____
39. Directs cease fire	_____	_____	_____	_____	_____
40. Directs chemical alarms be emplaced	_____	_____	_____	_____	_____
41. Directs coil formation	_____	_____	_____	_____	_____
42. Directs coil or herring-bone formation	_____	_____	_____	_____	_____
43. Directs communications be checked	_____	_____	_____	_____	_____
44. Directs covering fires be provided	_____	_____	_____	_____	_____
45. Directs covering fire position be held	_____	_____	_____	_____	_____
46. Directs critical points be crossed	_____	_____	_____	_____	_____
47. Directs defense of position	_____	_____	_____	_____	_____
48. Directs defensive position be prepared	_____	_____	_____	_____	_____
49. Directs displacement	_____	_____	_____	_____	_____
50. Directs emergency repairs be made	_____	_____	_____	_____	_____

EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION

PLATOON LEADER TASK	None	Small	Moderate	Large	Extreme
51. Directs enemy be engaged	_____	_____	_____	_____	_____
52. Directs enemy covering obstacles be engaged	_____	_____	_____	_____	_____
53. Directs enemy on objective be destroyed	_____	_____	_____	_____	_____
54. Directs fire and maneuver be conducted	_____	_____	_____	_____	_____
55. Directs fire be held	_____	_____	_____	_____	_____
56. Directs flank tanks be tied in with other team elements	_____	_____	_____	_____	_____
57. Directs ground guards be posted	_____	_____	_____	_____	_____
58. Directs herringbone formation	_____	_____	_____	_____	_____
59. Directs holding of covering fire position	_____	_____	_____	_____	_____
60. Directs individual positions be prepared	_____	_____	_____	_____	_____
61. Directs line of departure be crossed	_____	_____	_____	_____	_____
62. Directs main guns be oriented	_____	_____	_____	_____	_____
63. Directs movement be initiated	_____	_____	_____	_____	_____
64. Directs movement into assault formation	_____	_____	_____	_____	_____
65. Directs movement into attack formation	_____	_____	_____	_____	_____
66. Directs movement into attack position	_____	_____	_____	_____	_____
67. Directs movement into defilade position	_____	_____	_____	_____	_____
68. Directs movement into designated position	_____	_____	_____	_____	_____

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
69. Directs movement into flank position	_____	_____	_____	_____	_____
70. Directs movement into overwatch position	_____	_____	_____	_____	_____
71. Directs movement into support position	_____	_____	_____	_____	_____
72. Directs movement into suppressive fire position	_____	_____	_____	_____	_____
73. Directs movement out of attack position	_____	_____	_____	_____	_____
74. Directs movement to flank	_____	_____	_____	_____	_____
75. Directs movement to occupy position to support breaching operation	_____	_____	_____	_____	_____
76. Directs movement to pass through breach	_____	_____	_____	_____	_____
77. Directs move out in previous formation	_____	_____	_____	_____	_____
78. Directs obstacles, mines, and flares be installed	_____	_____	_____	_____	_____
79. Directs open fire.	_____	_____	_____	_____	_____
80. Directs passage of lines be conducted	_____	_____	_____	_____	_____
81. Directs phase lines be crossed	_____	_____	_____	_____	_____
82. Directs position be held	_____	_____	_____	_____	_____
83. Directs preparation for bypass	_____	_____	_____	_____	_____
84. Directs pre-fire checks be conducted	_____	_____	_____	_____	_____
85. Directs range cards be prepared	_____	_____	_____	_____	_____

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PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
86. Directs readiness actions be performed	_____	_____	_____	_____	_____
87. Directs release point be crossed	_____	_____	_____	_____	_____
88. Directs resupply be performed	_____	_____	_____	_____	_____
89. Directs smoke be popped	_____	_____	_____	_____	_____
90. Directs specified movement	_____	_____	_____	_____	_____
91. Directs start point be crossed	_____	_____	_____	_____	_____
92. Directs successive delay position be occupied	_____	_____	_____	_____	_____
93. Directs supplies be distributed	_____	_____	_____	_____	_____
94. Directs suppressive fires	_____	_____	_____	_____	_____
95. Directs suppressive fires be shifted	_____	_____	_____	_____	_____
96. Directs suppressive fires on flank targets	_____	_____	_____	_____	_____
97. Directs surprise targets be engaged	_____	_____	_____	_____	_____
98. Directs surveillance be conducted	_____	_____	_____	_____	_____
99. Directs tanks be camouflaged	_____	_____	_____	_____	_____
100. Directs tanks be put in turret defilade	_____	_____	_____	_____	_____
101. Directs tanks move into firing position	_____	_____	_____	_____	_____
102. Directs tanks move to good fields of fire	_____	_____	_____	_____	_____

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PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
103. Directs targets be engaged with TIS (Thermal Image Sights)	_____	_____	_____	_____	_____
104. Directs targets in assigned sector be engaged	_____	_____	_____	_____	_____
105. Directs targets of opportunity be engaged	_____	_____	_____	_____	_____
106. Directs team on battle position be joined	_____	_____	_____	_____	_____
107. Directs team on objective be joined	_____	_____	_____	_____	_____
108. Directs the attack be accelerated	_____	_____	_____	_____	_____
109. Directs 3-man crews be organized	_____	_____	_____	_____	_____
110. Directs traveling	_____	_____	_____	_____	_____
111. Directs traveling overwatch	_____	_____	_____	_____	_____
112. Directs traveling reverse overwatch	_____	_____	_____	_____	_____
113. Issues FRAGO	_____	_____	_____	_____	_____
114. Issues OPORD	_____	_____	_____	_____	_____
115. Issues warning order	_____	_____	_____	_____	_____
116. Makes an estimate of the situation	_____	_____	_____	_____	_____
117. Makes a tentative plan	_____	_____	_____	_____	_____
118. Monitors indirect fires	_____	_____	_____	_____	_____
119. Monitors TOWs	_____	_____	_____	_____	_____
120. Plans displacement	_____	_____	_____	_____	_____

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PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
121. Prepares a fire plan	_____	_____	_____	_____	_____
122. Prepares an operation plan	_____	_____	_____	_____	_____
123. Provides target data to forward observer	_____	_____	_____	_____	_____
124. Reassesses tactical situation	_____	_____	_____	_____	_____
125. Reconnoiters assigned alternate position	_____	_____	_____	_____	_____
126. Reestablishes communications with TCs	_____	_____	_____	_____	_____
127. Reestablishes communications with the team	_____	_____	_____	_____	_____
128. Reports crossing phase lines	_____	_____	_____	_____	_____
129. Reports TOW effects	_____	_____	_____	_____	_____
130. Requests and adjusts preparatory fires	_____	_____	_____	_____	_____
131. Requests artillery fire and infantry support	_____	_____	_____	_____	_____
132. Requests Class I, III, and V supplies	_____	_____	_____	_____	_____
133. Requests direct covering fires	_____	_____	_____	_____	_____
134. Requests final protective fires	_____	_____	_____	_____	_____
135. Requests illumination	_____	_____	_____	_____	_____
136. Requests indirect final protective fires	_____	_____	_____	_____	_____
137. Requests indirect fires	_____	_____	_____	_____	_____
138. Requests indirect fires be adjusted	_____	_____	_____	_____	_____

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PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
139. Requests indirect fires be shifted	_____	_____	_____	_____	_____
140. Requests indirect fires be stopped	_____	_____	_____	_____	_____
141. Requests permission to counterattack	_____	_____	_____	_____	_____
142. Requests permission to cover displacement	_____	_____	_____	_____	_____
143. Requests permission to displace	_____	_____	_____	_____	_____
144. Requests permission to fire and maneuver	_____	_____	_____	_____	_____
145. Requests permission to hold	_____	_____	_____	_____	_____
146. Requests permission to join team on battle position	_____	_____	_____	_____	_____
147. Requests permission to withdraw	_____	_____	_____	_____	_____
148. Requests readiness reports	_____	_____	_____	_____	_____
149. Requests SPOTREPS	_____	_____	_____	_____	_____
150. Requests supply status	_____	_____	_____	_____	_____
151. Requests suppressive fires	_____	_____	_____	_____	_____
152. Requests suppressive fires be shifted	_____	_____	_____	_____	_____
153. Requests suppressive fires be stopped	_____	_____	_____	_____	_____
154. Requests team fire plan	_____	_____	_____	_____	_____
155. Requests team patrol reports	_____	_____	_____	_____	_____

PLATOON LEADER TASK	EFFECT ON SUCCESSFUL ACCOMPLISHMENT OF MISSION				
	None	Small	Moderate	Large	Extreme
156. Requests TOWs open fire	_____	_____	_____	_____	_____
157. Requests TOW section reinforce platoon fire	_____	_____	_____	_____	_____
158. Requests wire commu- nications be installed	_____	_____	_____	_____	_____
159. Selects and announces withdrawal routes	_____	_____	_____	_____	_____
160. Submits SITREP	_____	_____	_____	_____	_____
161. Submits SPOTREP	_____	_____	_____	_____	_____

TIME AVAILABLE BEFORE STARTING TASK

PLATOON LEADER TASK	None	One Minute Or Less	Several Minutes	Several Hours	One Day Or More
18. Coordinates security of flanks with other team elements	_____	_____	_____	_____	_____
19. Coordinates with adjacent platoon leaders	_____	_____	_____	_____	_____
20. Coordinates with FIST leader	_____	_____	_____	_____	_____
21. Coordinates with TOW section leader	_____	_____	_____	_____	_____
22. Designates sectors of fire	_____	_____	_____	_____	_____
23. Designates tank targets	_____	_____	_____	_____	_____
24. Designates targets to forward observer	_____	_____	_____	_____	_____
25. Designates targets to TOW section	_____	_____	_____	_____	_____
26. Develops the situation	_____	_____	_____	_____	_____
27. Directs after operations maintenance be performed	_____	_____	_____	_____	_____
28. Directs air guards be kept alert	_____	_____	_____	_____	_____
29. Directs air guards be posted	_____	_____	_____	_____	_____
30. Directs alternate positions be prepared	_____	_____	_____	_____	_____
31. Directs appropriate movement	_____	_____	_____	_____	_____
32. Directs assault be started	_____	_____	_____	_____	_____
33. Directs attack be conducted	_____	_____	_____	_____	_____
34. Directs avenues of approach be covered	_____	_____	_____	_____	_____
35. Directs battle position be prepared	_____	_____	_____	_____	_____
36. Directs battle readiness be maintained	_____	_____	_____	_____	_____

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Platoon leader tasks differ in the amount of time that is available to the platoon leader before they must be started. Some platoon leader tasks must be started immediately. Others may be delayed for various periods of time before being started.

Please rate the following platoon leader tasks according to how much time the platoon leader would have available before starting the task. Remember to consider the decisions included in the task.

PLATOON LEADER TASK	TIME AVAILABLE BEFORE STARTING TASK				
	None	One Minute Or Less	Several Minutes	Several Hours	One Day Or More
1. Analyzes OPORD	_____	_____	_____	_____	_____
2. Assigns alternate positions	_____	_____	_____	_____	_____
3. Awaits permission to bypass	_____	_____	_____	_____	_____
4. Awaits time or permission to attack	_____	_____	_____	_____	_____
5. Awaits time or permission to open fire	_____	_____	_____	_____	_____
6. Checks positions for suitability	_____	_____	_____	_____	_____
7. Chooses a course of action	_____	_____	_____	_____	_____
8. Clarifies mission	_____	_____	_____	_____	_____
9. Conducts necessary coordination	_____	_____	_____	_____	_____
10. Conducts reconnaissance	_____	_____	_____	_____	_____
11. Controls application of direct fire	_____	_____	_____	_____	_____
12. Controls interval between tanks	_____	_____	_____	_____	_____
13. Controls interval with lead platoon	_____	_____	_____	_____	_____
14. Controls speed of tanks	_____	_____	_____	_____	_____
15. Coordinates fire distribution	_____	_____	_____	_____	_____
16. Coordinates indirect fires	_____	_____	_____	_____	_____
17. Coordinates tank sectors of fire	_____	_____	_____	_____	_____

TIME AVAILABLE BEFORE STARTING TASK

PLATOON LEADER TASK	None	One Minute Or Less	Several Minutes	Several Hours	One Day Or More
37. Directs bounding overwatch	_____	_____	_____	_____	_____
38. Directs bounding reverse overwatch	_____	_____	_____	_____	_____
39. Directs cease fire	_____	_____	_____	_____	_____
40. Directs chemical alarms be emplaced	_____	_____	_____	_____	_____
41. Directs coil formation	_____	_____	_____	_____	_____
42. Directs coil or herringbone formation	_____	_____	_____	_____	_____
43. Directs communications be checked	_____	_____	_____	_____	_____
44. Directs covering fires be provided	_____	_____	_____	_____	_____
45. Directs covering fire position be held	_____	_____	_____	_____	_____
46. Directs critical points be crossed	_____	_____	_____	_____	_____
47. Directs defense of position	_____	_____	_____	_____	_____
48. Directs defensive position be prepared	_____	_____	_____	_____	_____
49. Directs displacement	_____	_____	_____	_____	_____
50. Directs emergency repairs be made	_____	_____	_____	_____	_____
51. Directs enemy be engaged	_____	_____	_____	_____	_____
52. Directs enemy covering obstacles be engaged	_____	_____	_____	_____	_____
53. Directs enemy on objective be destroyed	_____	_____	_____	_____	_____
54. Directs fire and maneuver be conducted	_____	_____	_____	_____	_____
55. Directs fire be held	_____	_____	_____	_____	_____
56. Directs flank tanks be tied in with other team elements	_____	_____	_____	_____	_____

TIME AVAILABLE BEFORE STARTING TASK

PLATOON LEADER TASK	None	One Minute Or Less	Several Minutes	Several Hours	One Day Or More
57. Directs ground guards be posted	_____	_____	_____	_____	_____
58. Directs herringbone formation	_____	_____	_____	_____	_____
59. Directs holding of covering fire position	_____	_____	_____	_____	_____
60. Directs individual positions be prepared	_____	_____	_____	_____	_____
61. Directs line of departure be crossed	_____	_____	_____	_____	_____
62. Directs main guns be oriented	_____	_____	_____	_____	_____
63. Directs movement be initiated	_____	_____	_____	_____	_____
64. Directs movement into assault formation	_____	_____	_____	_____	_____
65. Directs movement into attack formation	_____	_____	_____	_____	_____
66. Directs movement into attack position	_____	_____	_____	_____	_____
67. Directs movement into defilade position	_____	_____	_____	_____	_____
68. Directs movement into designated position	_____	_____	_____	_____	_____
69. Directs movement into flank position	_____	_____	_____	_____	_____
70. Directs movement into overwatch position	_____	_____	_____	_____	_____
71. Directs movement into support position	_____	_____	_____	_____	_____
72. Directs movement into suppressive fire position	_____	_____	_____	_____	_____
73. Directs movement out of attack position	_____	_____	_____	_____	_____

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TIME AVAILABLE BEFORE STARTING TASK

PLATOON LEADER TASK	None	One Minute Or Less	Several Minutes	Several Hours	One Day Or More
74. Directs movement to flank	_____	_____	_____	_____	_____
75. Directs movement to occupy position to support breaching operation	_____	_____	_____	_____	_____
76. Directs movement to pass through breach	_____	_____	_____	_____	_____
77. Directs move out in previous formation	_____	_____	_____	_____	_____
78. Directs obstacles, mines, and flares be installed	_____	_____	_____	_____	_____
79. Directs open fire	_____	_____	_____	_____	_____
80. Directs passage of lines be conducted	_____	_____	_____	_____	_____
81. Directs phase lines be crossed	_____	_____	_____	_____	_____
82. Directs position be held	_____	_____	_____	_____	_____
83. Directs preparation for bypass	_____	_____	_____	_____	_____
84. Directs pre-fire checks be conducted	_____	_____	_____	_____	_____
85. Directs range cards be prepared	_____	_____	_____	_____	_____
86. Directs readiness actions be performed	_____	_____	_____	_____	_____
87. Directs release point be crossed	_____	_____	_____	_____	_____
88. Directs resupply be performed	_____	_____	_____	_____	_____
89. Directs smoke be popped	_____	_____	_____	_____	_____
90. Directs specified movement	_____	_____	_____	_____	_____
91. Directs start point be crossed	_____	_____	_____	_____	_____
92. Directs successive delay position be occupied	_____	_____	_____	_____	_____

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TIME AVAILABLE BEFORE STARTING TASK

PLATOON LEADER TASK	None	One Minute Or Less	Several Minutes	Several Hours	One Day Or More
93. Directs supplies be distributed	_____	_____	_____	_____	_____
94. Directs suppressive fires	_____	_____	_____	_____	_____
95. Directs suppressive fires be shifted	_____	_____	_____	_____	_____
96. Directs suppressive fires on flank targets	_____	_____	_____	_____	_____
97. Directs surprise targets be engaged	_____	_____	_____	_____	_____
98. Directs surveillance be conducted	_____	_____	_____	_____	_____
99. Directs tanks be camouflaged	_____	_____	_____	_____	_____
100. Directs tanks be put in turret defilade	_____	_____	_____	_____	_____
101. Directs tanks move into firing position	_____	_____	_____	_____	_____
102. Directs tanks move to good fields of fire	_____	_____	_____	_____	_____
103. Directs targets be engaged with TIS (Thermal Image Sights)	_____	_____	_____	_____	_____
104. Directs targets in assigned sector be engaged	_____	_____	_____	_____	_____
105. Directs targets of opportunity be engaged	_____	_____	_____	_____	_____
106. Directs team on battle position be joined	_____	_____	_____	_____	_____
107. Directs team on objective be joined	_____	_____	_____	_____	_____
108. Directs the attack be accelerated	_____	_____	_____	_____	_____
109. Directs 3-man crews be organized	_____	_____	_____	_____	_____

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TIME AVAILABLE BEFORE STARTING TASK

PLATOON LEADER TASK	None	One Minute Or Less	Several Minutes	Several Hours	One Day Or More
110. Directs traveling	_____	_____	_____	_____	_____
111. Directs traveling overwatch	_____	_____	_____	_____	_____
112. Directs traveling reverse overwatch	_____	_____	_____	_____	_____
113. Issues FRAGO	_____	_____	_____	_____	_____
114. Issues OPORD	_____	_____	_____	_____	_____
115. Issues warning order	_____	_____	_____	_____	_____
116. Makes an estimate of the situation	_____	_____	_____	_____	_____
117. Makes a tentative plan	_____	_____	_____	_____	_____
118. Monitors indirect fires	_____	_____	_____	_____	_____
119. Monitors TOWs	_____	_____	_____	_____	_____
120. Plans displacement	_____	_____	_____	_____	_____
121. Prepares a fire plan	_____	_____	_____	_____	_____
122. Prepares an operation plan	_____	_____	_____	_____	_____
123. Provides target data to forward observer	_____	_____	_____	_____	_____
124. Reassesses tactical situation	_____	_____	_____	_____	_____
125. Reconnoiters assigned alternate position	_____	_____	_____	_____	_____
126. Reestablishes communications with TCs	_____	_____	_____	_____	_____
127. Reestablishes communications with the team	_____	_____	_____	_____	_____
128. Reports crossing phase lines	_____	_____	_____	_____	_____
129. Reports TOW effects	_____	_____	_____	_____	_____

PT5463b

TIME AVAILABLE BEFORE STARTING TASK

PLATOON LEADER TASK	None	One Minute Or Less	Several Minutes	Several Hours	One Day Or More
130. Requests and adjusts preparatory fires	_____	_____	_____	_____	_____
131. Requests artillery fire and infantry support	_____	_____	_____	_____	_____
132. Requests Class I, III, and V supplies	_____	_____	_____	_____	_____
133. Requests direct covering fires	_____	_____	_____	_____	_____
134. Requests final protective fires	_____	_____	_____	_____	_____
135. Requests illumination	_____	_____	_____	_____	_____
136. Requests indirect final protective fires	_____	_____	_____	_____	_____
137. Requests indirect fires	_____	_____	_____	_____	_____
138. Requests indirect fires be adjusted	_____	_____	_____	_____	_____
139. Requests indirect fires be shifted	_____	_____	_____	_____	_____
140. Requests indirect fires be stopped	_____	_____	_____	_____	_____
141. Requests permission to counter-attack	_____	_____	_____	_____	_____
142. Requests permission to cover displacement	_____	_____	_____	_____	_____
143. Requests permission to displace	_____	_____	_____	_____	_____
144. Requests permission to fire and maneuver	_____	_____	_____	_____	_____
145. Requests permission to hold	_____	_____	_____	_____	_____
146. Requests permission to join team on battle position	_____	_____	_____	_____	_____

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TIME AVAILABLE BEFORE STARTING TASK

PLATOON LEADER TASK	None	One Minute Or Less	Several Minutes	Several Hours	One Day Or More
147. Requests permission to withdraw	_____	_____	_____	_____	_____
148. Requests readiness reports	_____	_____	_____	_____	_____
149. Requests SPOTREPS	_____	_____	_____	_____	_____
150. Requests supply status	_____	_____	_____	_____	_____
151. Requests suppressive fires	_____	_____	_____	_____	_____
152. Requests suppressive fires be shifted	_____	_____	_____	_____	_____
153. Requests suppressive fires be stopped	_____	_____	_____	_____	_____
154. Requests team fire plan	_____	_____	_____	_____	_____
155. Requests team patrol reports	_____	_____	_____	_____	_____
156. Requests TOWs open fire	_____	_____	_____	_____	_____
157. Requests TOW section reinforce platoon fire	_____	_____	_____	_____	_____
158. Requests wire communications be installed	_____	_____	_____	_____	_____
159. Selects and announces withdrawal routes	_____	_____	_____	_____	_____
160. Submits SITREP	_____	_____	_____	_____	_____
161. Submits SPOTREP	_____	_____	_____	_____	_____

APPENDIX D

Means and Standard Deviations of Platoon Leader Tasks
Rated Using the ISD-Based Questionnaire

Table D-1

Means and Standard Deviations of Platoon Leader
Tasks Rated Using the ISD-Based Questionnaire^a

Task ^b	SCALE							
	Damage/Injury		Time Available		Time to Learn		Mission Success	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
1	3.52	1.43	3.00	1.00	4.12	1.05	4.45	0.85
2	3.28	1.05	3.18	0.68	3.32	1.00	3.63	0.76
3	2.92	0.95	2.86	0.77	2.20	1.03	3.08	0.83
4	3.14	1.13	2.84	0.91	2.08	1.06	3.75	0.90
5	3.66	1.12	2.17	0.85	2.02	1.06	3.94	0.90
6	3.47	1.18	3.29	0.81	3.52	1.03	3.88	0.72
7	3.95	1.20	2.77	0.81	3.75	1.10	4.49	0.62
8	3.40	1.20	2.86	0.83	3.14	1.11	4.28	0.72
9	3.32	1.17	3.59	0.68	3.67	1.02	3.97	0.75
10	3.61	1.12	3.67	0.64	4.26	0.92	4.17	0.82
11	3.75	0.98	2.49	0.95	3.89	1.02	4.15	0.89
12	2.92	0.85	2.22	0.84	3.03	1.10	3.00	0.71
13	2.92	0.82	2.28	0.89	3.00	1.14	3.12	0.72
14	2.91	0.74	2.17	0.78	2.84	1.15	3.05	0.67
15	3.54	1.05	2.67	0.94	3.88	1.12	3.98	0.76
16	3.65	1.01	2.95	0.84	4.11	0.96	4.14	0.90
17	3.57	1.03	2.86	0.89	3.52	1.04	3.98	0.72
18	3.57	1.05	3.19	0.66	3.13	1.00	3.88	0.65
19	3.22	1.04	3.22	0.58	2.97	1.01	3.77	0.58
20	3.19	1.22	3.19	0.67	3.23	0.96	3.98	0.83
21	3.05	1.13	3.19	0.64	3.02	0.98	3.58	0.94
22	3.38	1.10	3.02	0.72	3.30	1.06	3.89	0.77
23	3.23	1.14	2.55	0.85	2.94	0.97	3.48	0.95
24	3.08	1.14	2.63	0.80	3.06	1.08	3.64	1.00
25	3.03	1.14	2.56	0.85	2.89	0.99	3.56	0.94
26	4.03	0.88	2.50	0.98	4.02	1.12	4.37	0.65
27	2.94	1.12	3.34	0.85	2.86	1.32	3.42	0.79
28	3.06	1.18	2.35	0.98	2.09	0.82	3.28	0.74
29	3.11	1.19	2.37	0.98	2.11	0.88	3.37	0.78
30	3.23	1.07	3.12	0.93	2.72	1.06	3.60	0.75
31	3.34	1.08	2.37	0.86	3.16	1.11	3.71	0.74
32	3.72	1.03	2.03	0.79	2.95	1.17	4.14	0.77
33	3.95	1.01	2.11	0.87	3.22	1.27	4.06	0.98
34	3.65	1.08	2.72	0.82	3.05	1.19	4.03	0.79
35	3.66	1.09	2.98	1.02	3.30	1.15	4.14	0.68
36	3.35	1.14	2.77	1.11	2.84	1.22	3.92	0.74

SCALE								
Task ^b	Damage/Injury		Time Available		Time to Learn		Mission Success	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
37	3.35	0.99	2.22	0.78	2.92	1.12	3.71	0.79
38	3.25	0.98	2.29	0.75	2.92	1.16	3.65	0.81
39	2.77	1.25	1.86	0.75	2.29	1.01	3.16	1.06
40	3.54	1.25	2.64	0.86	2.83	0.99	3.88	0.98
41	2.50	0.98	2.42	0.84	2.56	1.13	2.69	0.88
42	2.52	0.98	2.31	0.76	2.58	1.03	2.74	0.90
43	3.00	1.20	2.54	0.85	2.42	1.02	3.62	0.90
44	3.48	1.05	2.14	0.83	2.81	1.04	3.83	0.85
45	3.35	1.02	2.18	0.79	2.75	1.04	3.77	0.82
46	3.22	1.04	2.38	0.78	2.87	1.11	3.57	0.98
47	3.86	0.93	2.69	0.95	3.61	1.29	4.05	0.72
48	3.54	1.05	2.92	0.96	3.38	1.18	4.05	0.69
49	3.46	1.00	2.35	0.84	3.17	1.08	3.83	0.67
50	2.94	0.90	2.60	0.93	2.84	1.14	3.32	0.71
51	4.11	0.95	1.91	0.84	2.62	1.18	4.31	0.71
52	3.63	0.99	1.95	0.84	2.59	1.16	4.11	0.74
53	4.03	1.00	1.98	0.87	2.75	1.16	4.32	0.77
54	4.02	0.84	2.09	0.79	3.25	1.18	4.29	0.76
55	3.26	1.03	1.97	0.83	2.39	1.03	3.69	0.86
56	3.14	1.09	2.75	0.79	2.69	0.91	3.71	0.61
57	2.85	1.00	2.71	0.73	2.25	0.91	3.31	0.79
58	2.49	0.90	2.41	0.78	2.46	1.01	2.78	0.81
59	3.06	1.09	2.44	0.81	2.61	0.94	3.53	0.78
60	2.97	1.05	2.94	0.89	2.83	1.06	3.17	0.96
61	2.82	1.03	2.30	0.94	2.23	0.89	3.49	0.95
62	2.97	1.15	2.34	0.80	2.48	0.91	3.55	0.88
63	3.06	1.18	2.29	0.77	2.44	1.04	3.51	0.81
64	3.23	1.07	2.22	0.77	2.86	1.04	3.75	0.77
65	3.28	1.08	2.20	0.80	2.89	1.03	3.86	0.79
66	3.16	1.04	2.30	0.82	2.81	1.01	3.68	0.83
67	3.14	1.13	2.35	0.81	2.72	1.02	3.49	0.73
68	3.05	1.05	2.43	0.86	2.70	0.99	3.52	0.71
69	2.92	0.99	2.46	0.78	2.77	1.02	3.44	0.71
70	3.15	1.12	2.32	0.80	2.88	0.95	3.72	0.77
71	2.98	1.12	2.39	0.78	2.78	0.94	3.55	0.73
72	3.29	1.06	2.28	0.79	2.84	0.95	3.77	0.79
73	3.28	1.16	2.33	0.74	2.77	1.00	3.59	0.71
74	3.14	1.06	2.40	0.77	2.72	0.95	3.55	0.78
75	3.29	1.10	2.58	0.71	3.03	1.04	3.77	0.75
76	3.46	1.08	2.44	0.81	2.95	1.05	3.72	0.77
77	2.83	0.98	2.40	0.77	2.38	0.97	3.23	0.77
78	3.23	0.96	3.27	0.86	3.36	1.06	3.75	0.82
79	3.71	1.20	1.73	0.74	2.28	0.97	4.33	0.82
80	2.97	1.16	2.95	0.95	3.19	1.00	3.84	0.81
81	2.63	0.93	2.38	0.83	2.25	0.87	3.44	0.81
82	3.75	1.06	2.34	0.82	2.51	1.01	3.98	0.83
83	2.98	0.98	2.70	0.81	2.69	0.97	3.46	0.69
84	2.86	1.38	2.91	1.02	2.77	1.00	3.61	1.02

SCALE								
Task ^b	Damage/Injury		Time Available		Time to Learn		Mission Success	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
85	2.75	1.33	2.98	0.97	2.83	1.00	3.59	0.99
86	2.85	1.19	2.95	1.05	2.77	1.08	3.40	0.91
87	2.57	0.93	2.56	0.86	2.23	0.89	3.17	0.85
88	2.94	1.22	3.06	0.88	2.92	0.96	3.69	1.00
89	3.05	1.11	2.16	0.78	2.44	1.01	3.41	0.80
90	2.86	1.12	2.38	0.70	2.84	1.01	3.44	0.76
91	2.60	1.07	2.42	0.91	2.16	0.84	3.29	0.91
92	3.42	1.07	2.59	0.75	2.95	1.09	3.81	0.69
93	2.86	1.25	3.05	0.81	2.59	0.93	3.52	0.92
94	3.68	1.11	2.02	0.79	3.00	1.01	4.08	0.78
95	3.63	1.14	1.92	0.76	2.92	0.98	4.13	0.81
96	3.58	1.12	2.05	0.76	2.91	1.02	4.05	0.83
97	3.88	1.13	1.72	0.84	2.71	1.06	4.05	0.85
98	3.12	1.07	2.84	0.84	2.47	0.85	3.68	0.84
99	3.08	1.14	2.89	0.89	2.64	1.01	3.64	0.95
100	3.14	1.22	2.68	0.80	2.48	0.98	3.69	0.85
101	3.37	1.13	2.37	0.77	2.56	0.94	3.79	0.85
102	3.54	1.11	2.41	0.82	2.78	1.00	3.84	0.85
103	3.11	1.24	2.25	0.89	2.76	0.98	3.69	0.88
104	3.40	1.18	2.02	0.81	2.50	0.94	3.81	0.90
105	3.35	1.07	2.00	0.88	2.37	0.89	3.75	0.86
106	3.06	0.98	2.61	0.66	2.68	1.00	3.63	0.81
107	3.05	0.98	2.60	0.66	2.62	0.94	3.63	0.77
108	3.74	0.99	2.03	0.78	2.77	1.08	3.98	0.75
109	3.11	1.16	2.89	0.78	2.59	1.14	3.43	1.01
110	2.50	0.91	2.25	0.77	2.45	0.87	3.10	0.71
111	2.74	0.94	2.23	0.77	2.48	0.89	3.25	0.74
112	2.78	1.01	2.24	0.80	2.61	0.97	3.27	0.73
113	3.75	1.41	2.80	0.74	3.83	1.02	4.52	0.67
114	3.64	1.38	3.42	0.71	4.23	0.92	4.55	0.69
115	3.30	1.41	2.86	0.77	3.61	1.06	4.36	0.82
116	3.65	1.26	3.02	0.77	4.10	0.96	4.47	0.71
117	3.52	1.25	3.23	0.66	3.94	0.96	4.36	0.68
118	3.28	1.11	2.52	0.86	3.17	1.02	3.84	0.83
119	3.00	1.06	2.58	0.88	2.97	1.06	3.52	0.82
120	3.31	1.13	3.17	0.72	2.56	0.96	3.87	0.77
121	3.42	1.21	3.41	0.56	3.83	0.94	4.13	0.81
122	3.48	1.26	3.57	0.67	4.27	0.88	4.10	0.95
123	3.37	1.14	2.92	0.76	3.31	0.99	3.92	0.81
124	3.55	1.20	2.80	0.72	3.58	1.08	4.19	0.79
125	3.15	1.03	3.38	0.58	3.28	0.98	3.81	0.72
126	3.18	1.32	2.59	0.80	2.53	0.91	3.94	0.90
127	3.28	1.35	2.54	0.78	2.53	0.82	4.05	0.81
128	2.72	1.27	2.08	0.74	2.08	0.62	3.43	0.93
129	2.34	1.05	2.41	0.77	2.14	0.64	3.11	0.89
130	3.34	1.12	2.56	0.89	3.47	1.07	3.98	0.75
131	3.35	1.28	2.59	0.90	3.43	1.06	4.17	0.75
132	3.17	1.33	3.22	0.73	3.09	0.85	3.89	0.90

Task ^b	SCALE							
	Damage/Injury		Time Available		Time to Learn		Mission Success	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
133	3.49	1.17	2.29	0.82	2.77	0.87	4.06	0.85
134	3.78	1.26	2.19	0.87	3.08	1.13	4.32	0.76
135	3.08	1.12	2.42	0.89	2.81	0.87	3.63	0.92
136	3.63	1.26	2.20	0.89	3.08	1.09	4.21	0.81
137	3.68	1.17	2.34	0.82	3.32	1.08	4.24	0.76
138	3.63	1.19	2.29	0.80	3.23	1.06	4.21	0.79
139	3.65	1.19	2.18	0.81	3.20	1.09	4.09	0.85
140	3.28	1.22	2.12	0.84	2.77	1.03	3.98	0.92
141	3.49	1.21	2.61	0.81	2.88	1.08	3.86	1.12
142	3.26	1.09	2.47	0.76	2.60	0.89	3.69	0.80
143	3.52	1.21	2.39	0.77	2.56	0.89	3.92	0.81
144	3.63	1.23	2.26	0.89	2.75	1.08	3.89	0.99
145	3.32	1.17	2.38	0.75	2.52	0.93	3.63	0.89
146	3.05	1.02	2.58	0.75	2.42	0.81	3.56	0.82
147	3.52	1.22	2.42	0.79	2.66	0.98	3.95	0.85
148	2.54	1.15	2.72	0.77	2.38	0.87	3.37	0.90
149	2.75	1.28	2.41	0.77	2.49	0.95	3.59	1.04
150	2.63	1.21	2.64	0.74	2.44	0.95	3.52	0.96
151	3.40	1.30	2.17	0.80	2.75	0.96	4.06	0.88
152	3.35	1.18	2.17	0.82	2.67	0.94	4.11	0.84
153	3.28	1.24	2.14	0.81	2.56	0.96	3.90	0.91
154	2.84	1.21	2.98	0.85	2.69	0.94	3.73	0.77
155	2.71	1.22	2.84	0.80	2.51	0.90	3.50	0.78
156	3.26	1.24	2.03	0.82	2.38	0.83	3.87	0.97
157	3.18	1.25	2.31	0.81	2.44	0.85	3.84	0.90
158	2.45	1.08	3.13	0.88	2.52	0.91	3.10	0.78
159	3.34	1.20	2.98	0.72	3.22	0.94	4.00	0.80
160	2.86	1.45	2.52	0.73	3.19	1.04	4.17	0.90
161	2.94	1.48	2.36	0.76	3.06	1.02	4.20	0.88

^a n = 61 to 65

^b Numbers corresponds to task numbers used in ISD-Based Questionnaire.
See Appendix C for task titles.

APPENDIX E

Means and Standard Deviations of Platoon
Leader Tasks Rated Using the Mission-Based Questionnaire

Table E-1
Means and Standard Deviations of Platoon Leader Tasks
Rated Using the Mission-Based Questionnaire

Mission Phase	Task ^b	SCALE											
		Firepower		Mobility		Command		Survivability		Sustainment		Mission Success	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Action on Contact	Immediate Action												
	89	3.30	1.18	4.09	1.02	3.28	1.15	4.33	0.95	3.89	1.13	3.72	1.05
	67	3.80	1.00	4.39	0.75	3.68	0.97	4.56	0.66	4.36	0.84	4.11	0.88
	161 ^c	3.42	1.28	3.34	1.18	3.80	1.18	3.37	1.16	3.46	1.07	3.89	0.96
	51 ^d	4.35	0.74	3.81	0.97	3.67	0.95	4.33	0.69	4.32	0.78	4.42	0.68
Develop Situation	137 ^{c,d}	4.32	0.69	3.91	1.07	3.56	1.04	4.39	0.65	4.28	0.90	4.32	0.69
	138 ^{c,d}	4.21	0.82	3.77	1.10	3.49	1.07	4.25	0.76	4.11	0.98	4.14	0.85
	149 ^d	3.66	0.94	3.51	1.04	4.04	0.89	3.63	1.08	3.70	0.96	3.77	1.00
	26	4.23	0.63	4.07	0.73	4.02	0.79	4.16	0.82	4.11	0.75	4.34	0.72
	160 ^{c,d}	3.67	1.01	3.46	1.04	3.84	1.10	3.58	1.08	3.63	0.98	4.02	0.98
Occupy Suppressive Fire Position	70	4.04	0.91	4.25	0.83	3.89	0.84	4.33	0.87	4.21	1.00	4.32	0.74
	51 ^d	4.35	0.91	3.91	0.87	3.91	0.83	4.28	0.86	4.16	0.92	4.35	0.69
	149 ^d	3.44	1.00	3.42	1.05	4.04	0.89	3.56	1.09	3.68	0.95	3.74	0.94
	137 ^d	4.07	0.90	3.65	1.19	3.53	0.98	4.19	0.93	4.14	0.95	4.16	0.94
	138 ^{c,d}	3.98	0.92	3.51	1.23	3.53	1.04	4.09	0.97	3.91	1.04	4.05	0.89
	160 ^{c,d}	3.49	1.05	3.37	1.08	3.79	1.11	3.63	1.14	3.68	1.09	3.88	0.98

SCALE													
Mission	Task ^b	Firepower		Mobility		Command		Survivability		Sustainment		Mission Success	
Phase		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
<u>Hasty Attack</u>													
Conduct Fire	113	3.91	0.95	3.91	0.95	4.56	0.71	3.89	0.86	3.70	0.98	4.18	0.88
	66	3.61	1.03	4.05	0.81	3.88	0.89	3.74	0.97	3.53	1.12	3.86	0.92
	65	3.84	0.92	4.14	0.79	3.95	0.87	3.89	0.97	3.60	1.10	3.98	0.90
	73	3.79	0.96	4.18	0.79	3.91	0.94	3.96	0.94	3.67	1.01	3.93	0.95
	137 ^c	4.30	0.76	3.61	1.06	3.44	1.10	4.32	0.83	4.09	0.95	4.39	0.68
	138 ^c	4.26	0.74	3.58	1.07	3.56	1.07	4.28	0.82	4.05	0.91	4.32	0.74
	105	4.14	0.89	3.52	0.95	3.71	1.14	4.18	0.85	4.11	0.82	4.27	0.67
	54	4.37	0.62	4.18	0.79	4.05	0.81	4.28	0.75	4.09	0.89	4.48	0.60
Conduct Assault	64	3.88	0.83	4.04	0.73	3.91	0.95	4.05	0.79	3.81	0.90	4.02	0.76
	139	4.18	0.83	3.65	0.99	3.67	1.01	4.21	0.77	3.98	0.88	4.21	0.75
	32	4.16	0.86	4.26	0.72	4.00	0.89	4.33	0.79	4.02	0.90	4.39	0.70
	152	4.26	0.72	3.82	1.00	3.68	0.95	4.28	0.70	4.07	0.82	4.26	0.77
	140	3.98	1.03	3.81	1.08	3.58	1.13	4.09	1.02	3.88	0.96	4.04	0.94
	153	4.07	0.88	3.61	1.05	3.67	1.12	4.14	0.97	3.91	0.93	4.02	0.94
	160 ^c	3.19	1.17	3.18	1.14	3.72	1.13	3.33	1.21	3.28	1.18	3.68	1.15
<u>Defend Battle Position</u>													
Maintain Surveillance	135	2.98	1.20	2.48	1.11	2.79	1.16	3.02	1.20	2.77	1.11	2.84	1.06
	155	3.57	1.01	3.39	1.09	3.66	1.05	3.84	1.01	3.48	1.03	3.73	0.98
Initiate Indirect Fire	137 ^{c,d}	4.20	0.75	3.46	1.03	3.34	1.08	4.16	0.73	4.02	0.88	4.09	0.94
	138 ^{c,d}	4.23	0.74	3.46	1.06	3.34	1.12	4.13	0.74	3.98	0.84	4.11	0.89

Mission Phase	Task ^b	SCALE											
		Firepower		Mobility		Command		Survivability		Sustainment		Mission Success	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Initiate Direct Fire	25	4.05	0.75	3.21	1.07	3.66	0.96	3.95	0.84	3.79	1.00	3.93	0.85
	119	3.86	0.86	3.04	1.03	3.48	1.04	3.61	0.87	3.55	0.95	3.50	0.93
	161 ^c	3.64	1.05	3.43	1.13	3.84	1.07	3.79	1.00	3.79	1.02	3.95	0.94
	103	3.91	1.01	3.24	1.19	3.42	1.10	3.85	1.04	3.76	1.07	3.91	1.11
	51 ^c	4.34	0.75	3.68	1.08	3.96	0.76	4.27	0.80	4.29	0.65	4.46	0.63
	137 ^{c,d}	4.21	0.78	3.59	1.12	3.63	1.00	4.34	0.69	4.18	0.74	4.39	0.73
	138 ^{c,d}	3.98	0.88	3.50	1.18	3.52	1.10	4.27	0.67	4.07	0.85	4.23	0.81
	157	4.09	0.86	3.32	1.06	3.70	0.87	4.05	0.82	3.91	0.77	3.98	1.02
	160 ^c	3.57	1.02	3.48	1.08	3.91	1.03	3.88	0.99	3.88	1.06	4.09	0.94
<u>Occupy Battle Position</u>													
Occupy	68	3.68	0.85	3.91	0.91	3.48	0.97	3.84	0.93	3.45	0.95	3.88	0.92
	34	4.35	0.79	3.46	1.12	3.29	1.16	4.20	0.82	3.96	0.93	4.45	0.66
	100	3.75	0.83	3.40	1.08	3.04	1.06	4.57	0.60	4.27	0.80	4.20	0.77
	99	3.55	0.97	3.26	1.09	2.95	1.03	4.61	0.56	4.11	0.89	4.09	0.80
	57	2.95	1.08	2.96	1.15	3.14	1.05	4.09	0.92	3.70	0.95	3.59	1.06
Organize	29	3.12	1.05	2.86	1.23	3.00	1.25	4.36	0.82	3.91	0.86	3.66	1.03
	22	4.54	0.66	3.21	1.10	4.05	0.88	4.04	0.83	4.02	0.82	4.38	0.65
	23	4.32	0.71	3.11	1.08	3.80	1.03	3.93	0.78	3.75	0.96	4.23	0.71
	6	4.19	0.72	3.67	0.99	3.57	1.04	4.46	0.63	4.20	0.67	4.23	0.79
	102	4.39	0.75	3.60	1.03	3.64	1.07	4.21	0.71	4.16	0.78	4.36	0.62
	2	4.11	0.70	3.96	0.87	3.89	0.87	4.36	0.62	4.02	0.82	4.14	0.70
	85	3.95	0.95	2.95	1.07	3.64	1.23	3.82	1.01	3.79	1.09	3.80	0.89
	40	3.12	1.24	2.82	1.22	3.13	1.24	4.41	0.91	4.11	0.95	3.93	0.87
	78	3.68	0.93	3.61	1.04	3.11	1.23	4.27	0.77	4.11	0.78	4.11	0.73
	20	4.09	0.89	3.09	1.12	4.07	1.01	4.00	0.97	3.96	0.93	4.20	0.77

Mission Phase	Task ^b	SCALE											
		Firepower		Mobility		Command		Survivability		Sustainment		Mission Success	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
	21	3.96	0.82	3.07	1.13	4.00	1.01	3.96	0.97	3.93	0.87	4.02	0.90
	19	4.09	0.87	3.57	1.06	4.23	0.81	4.13	0.90	4.11	0.76	4.30	0.74
	121	4.35	0.77	3.02	1.16	4.05	1.00	4.20	0.78	4.11	0.78	4.20	0.70
	125	3.88	0.85	4.13	0.90	3.71	1.03	4.29	0.71	4.02	0.77	4.14	0.72
	159	3.36	1.10	4.41	0.68	3.91	1.00	4.38	0.62	4.16	0.87	4.18	0.74
	120	3.44	1.10	4.51	0.69	4.04	0.91	4.43	0.57	4.22	0.79	4.23	0.76
	154	4.00	0.87	3.13	1.11	3.79	1.11	3.91	0.92	3.89	0.91	3.95	0.86
	158	3.25	1.07	2.86	1.15	4.27	0.85	3.70	1.04	3.73	1.02	3.61	1.02

^a N = 56 to 57

^b Numbers correspond to task numbers in ISD-Based Questionnaire. See Appendix C for task titles.

^c This platoon leader task appeared in more than one scenario.

^d This platoon leader task appeared in more than one phase within a scenario.

APPENDIX F

Rankings of Tasks on Rating Scales
Using the ISD-based Questionnaire

Table F-1

Rankings of Tasks on Rating Scales
Using the ISD-Based Questionnaire

Rank	Scale							
	Damage/Injury		Time Available		Time to Learn		Mission Success	
	Task ^a	Mean	Task ^a	Mean	Task ^a	Mean	Task ^a	Mean
1	51	4.11	97	1.72	122	4.27	114	4.55
2	53	4.03	79	1.73	10	4.26	113	4.52
3	26	4.03	39	1.86	114	4.23	7	4.49
4	54	4.02	51	1.91	1	4.12	118	4.47
5	33	3.95	95	1.92	16	4.11	1	4.45
6	7	3.95	52	1.97	116	4.10	26	4.37
7	97	3.88	55	1.97	26	4.02	117	4.36
8	47	3.86	53	1.98	117	3.94	115	4.38
9	134	3.78	105	2.00	11	3.89	79	4.33
10	113	3.75	94	2.02	15	3.88	134	4.32
11	82	3.75	104	2.02	121	3.83	53	4.32
12	11	3.75	32	2.03	113	3.83	51	4.31
13	108	3.74	108	2.03	7	3.75	54	4.29
14	32	3.72	156	2.03	9	3.67	8	4.28
15	79	3.71	96	2.05	115	3.81	137	4.24
16	137	3.68	128	2.08	47	3.61	138	4.21
17	94	3.68	54	2.09	124	3.58	136	4.21
18	35	3.66	33	2.11	120	3.58	161	4.20
19	5	3.68	140	2.12	17	3.52	124	4.19
20	139	3.65	44	2.14	6	3.52	160	4.17
21	116	3.65	153	2.14	130	3.47	131	4.17
22	34	3.65	89	2.16	131	3.43	10	4.17
23	16	3.65	5	2.17	48	3.38	11	4.15
24	114	3.64	14	2.17	78	3.36	35	4.14
25	144	3.63	151	2.17	137	3.32	32	4.14
26	138	3.63	152	2.17	2	3.32	16	4.14
27	138	3.63	45	2.18	123	3.31	121	4.13
28	95	3.63	139	2.18	35	3.30	95	4.13
29	52	3.63	134	2.19	22	3.30	152	4.11
30	10	3.61	65	2.20	125	3.28	52	4.11
31	96	3.58	136	2.20	54	3.25	122	4.10
32	18	3.57	12	2.22	138	3.23	139	4.09
33	17	3.57	37	2.22	20	3.23	94	4.08
34	124	3.55	64	2.22	159	3.22	151	4.06
35	102	3.54	111	2.23	33	3.22	133	4.06
36	48	3.54	112	2.24	139	3.20	33	4.06
37	40	3.54	103	2.25	160	3.19	127	4.05
38	15	3.54	110	2.25	80	3.19	97	4.05
39	147	3.52	144	2.26	118	3.17	96	4.05
40	143	3.52	13	2.28	49	3.17	48	4.05

Scale								
Rank	Damage/Injury		Time Available		Time to Learn		Mission Success	
	Task ^a	Mean	Task ^a	Mean	Task ^a	Mean	Task ^a	Mean
41	117	3.52	72	2.28	31	3.16	47	4.05
42	1	3.52	38	2.29	8	3.14	34	4.03
43	141	3.49	63	2.29	18	3.13	159	4.00
44	133	3.49	133	2.29	132	3.09	140	3.96
45	122	3.48	138	2.29	136	3.08	130	3.98
46	44	3.48	61	2.30	161	3.06	108	3.98
47	6	3.47	66	2.30	134	3.06	82	3.98
48	76	3.46	42	2.31	24	3.08	20	3.98
49	49	3.46	157	2.31	34	3.05	17	3.98
50	121	3.42	70	2.32	75	3.03	15	3.98
51	92	3.42	73	2.33	12	3.03	9	3.97
52	151	3.40	62	2.34	21	3.02	147	3.95
53	104	3.40	82	2.34	94	3.00	126	3.94
54	8	3.40	137	2.34	13	3.00	5	3.94
55	22	3.38	28	2.35	119	2.87	143	3.92
56	123	3.37	49	2.35	19	2.97	123	3.92
57	101	3.37	67	2.35	92	2.95	36	3.92
58	152	3.35	161	2.36	76	2.95	153	3.90
59	131	3.35	29	2.37	32	2.95	144	3.69
60	105	3.35	31	2.37	23	2.94	132	3.89
61	45	3.35	101	2.37	95	2.92	22	3.89
62	37	3.35	46	2.38	88	2.92	40	3.88
63	36	3.35	81	2.38	38	2.92	18	3.88
64	159	3.34	90	2.38	37	2.92	6	3.88
65	130	3.34	145	2.38	98	2.91	156	3.87
66	31	3.34	71	2.39	65	2.89	120	3.87
67	145	3.32	143	2.39	25	2.89	141	3.86
68	9	3.32	74	2.40	141	2.88	65	3.86
69	120	3.31	77	2.40	70	2.88	157	3.84
70	115	3.30	58	2.41	46	2.87	118	3.84
71	75	3.29	102	2.41	64	2.86	102	3.84
72	72	3.29	129	2.41	27	2.86	80	3.84
73	153	3.28	149	2.41	90	2.84	49	3.83
74	140	3.28	41	2.42	72	2.84	44	3.83
75	127	3.28	91	2.42	50	2.84	125	3.81
76	118	3.28	135	2.42	36	2.84	104	3.81
77	73	3.28	147	2.42	14	2.84	82	3.81
78	65	3.28	68	2.43	85	2.83	101	3.79
79	2	3.28	59	2.94	60	2.83	75	3.77
80	156	3.26	76	2.44	40	2.83	72	3.77
81	142	3.26	69	2.46	135	2.81	45	3.77
82	55	3.26	142	2.47	66	2.81	19	3.77
83	38	3.25	11	2.49	44	2.81	105	3.75
84	78	3.23	26	2.50	102	2.78	78	3.75
85	64	3.23	118	2.50	71	2.78	64	3.75
86	30	3.23	160	2.52	140	2.77	4	3.75
87	23	3.23	43	2.54	133	2.77	154	3.73
88	46	3.22	127	2.54	108	2.77	76	3.72
89	18	3.22	23	2.55	86	2.77	70	3.72
90	20	3.19	25	2.56	84	2.77	56	3.71

Scale								
Rank	Damage/Injury		Time Available		Time to Learn		Mission Success	
	Task ^a	Mean	Task ^a	Mean	Task ^a	Mean	Task ^a	Mean
91	157	3.18	87	2.56	73	2.77	37	3.71
92	126	3.18	119	2.56	69	2.77	31	3.71
93	132	3.17	130	2.58	103	2.76	142	3.69
94	66	3.16	75	2.58	151	2.75	103	3.69
95	125	3.15	146	2.58	144	2.75	100	3.69
96	70	3.15	92	2.59	53	2.75	88	3.69
97	100	3.14	126	2.59	45	2.75	55	3.69
98	74	3.14	131	2.59	74	2.72	98	3.68
99	67	3.14	50	2.60	67	2.72	66	3.66
100	56	3.14	107	2.60	30	2.72	38	3.65
101	4	3.14	106	2.61	97	2.71	99	3.64
102	98	3.12	141	2.61	68	2.70	24	3.64
103	109	3.11	24	2.63	154	2.69	145	3.63
104	103	3.11	40	2.64	83	2.69	135	3.63
105	29	3.11	150	2.64	56	2.69	107	3.63
106	135	3.08	15	2.67	106	2.68	106	3.63
107	99	3.08	100	2.68	152	2.67	2	3.63
108	24	3.08	47	2.69	147	2.88	43	3.62
109	106	3.06	83	2.70	99	2.64	84	3.61
110	63	3.06	57	2.71	107	2.62	30	3.60
111	59	3.06	34	2.72	51	2.62	149	3.59
112	28	3.06	148	2.72	112	2.61	85	3.59
113	146	3.05	56	2.75	59	2.61	73	3.59
114	107	3.05	7	2.77	142	2.60	21	3.58
115	89	3.05	36	2.77	109	2.59	46	3.57
116	68	3.05	113	2.80	93	2.59	146	3.58
117	21	3.05	124	2.80	52	2.59	25	3.56
118	25	3.03	4	2.84	42	2.58	74	3.55
119	119	3.00	98	2.84	153	2.56	71	3.55
120	43	3.00	155	2.84	153	2.56	62	3.55
121	83	2.98	3	2.86	101	2.56	59	3.53
122	71	2.98	8	2.86	41	2.56	150	3.52
123	80	2.97	17	2.86	127	2.53	119	3.52
124	62	2.97	115	2.86	126	2.53	93	3.52
125	60	2.97	99	2.89	158	2.52	68	3.52
126	161	2.94	109	2.89	145	2.52	63	3.51
127	88	2.94	84	2.91	155	2.51	155	3.50
128	50	2.94	48	2.92	82	2.51	67	3.49
129	27	2.94	123	2.92	104	2.50	61	3.49
130	69	2.92	60	2.94	149	2.49	23	3.48
131	13	2.92	16	2.95	111	2.48	83	3.46
132	12	2.92	80	2.95	100	2.48	90	3.44
133	3	2.92	86	2.95	62	2.48	81	3.44
134	14	2.91	35	2.98	98	2.47	69	3.44
135	160	2.86	85	2.98	58	2.46	128	3.43
136	93	2.86	154	2.98	110	2.45	109	3.43
137	90	2.86	159	2.98	157	2.44	27	3.42
138	84	2.86	1	3.00	150	2.44	89	3.41
139	86	2.85	22	3.02	89	2.44	86	3.40
140	57	2.85	116	3.02	63	2.44	148	3.37

Scale								
Rank	Damage/Injury		Time Available		Time to Learn		Mission Success	
	Task ^a	Mean	Task ^a	Mean	Task ^a	Mean	Task ^a	Mean
141	154	2.84	93	3.05	146	2.42	29	3.37
142	77	2.83	88	3.06	43	2.42	50	3.32
143	61	2.82	30	3.12	55	2.39	57	3.31
144	112	2.78	158	3.13	156	2.38	91	3.29
145	39	2.77	120	3.17	148	2.38	28	3.28
146	149	2.75	2	3.18	77	2.39	112	3.27
147	85	2.75	18	3.19	105	2.37	111	3.25
148	111	2.74	20	3.19	39	2.29	77	3.23
149	128	2.72	21	3.19	79	2.28	87	3.17
150	155	2.71	19	3.22	81	2.25	60	3.17
151	150	2.63	132	3.22	57	2.25	39	3.16
152	81	2.63	117	3.23	87	2.23	13	3.12
153	91	2.60	78	3.27	81	2.23	129	3.11
154	87	2.57	6	3.29	3	2.20	158	3.10
155	148	2.54	27	3.34	91	2.16	110	3.10
156	42	2.52	125	3.38	129	2.14	3	3.08
157	110	2.50	121	3.41	29	2.11	14	3.05
158	41	2.50	114	3.42	28	2.09	12	3.00
159	58	2.49	122	3.57	128	2.08	58	2.78
160	158	2.45	9	3.59	4	2.08	42	2.74
161	129	2.34	10	3.67	5	2.02	41	2.69

^aNumbers correspond to task numbers used in ISD-Based Questionnaire.
See Appendix C for task titles.

APPENDIX G

Rankings of Tasks on Rating Scale Using
the Mission-Based Questionnaire

Table G-1
Rankings of Tasks on Rating Scales Using the
Mission-Based Questionnaire

Scale																		
Firepower			Mobility			Command			Survivability			Sustainment			Mission Success			
Rank	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean
1	22	OBP-2	4.54	120	OBP-2	4.51	113	HA-1	4.56	99	OBP-1	4.61	67	MTC-1	4.36	54	HA-1	4.48
2	102	OBP-2	4.39	159	OBP-2	4.41	158	OBP-2	4.27	100	OBP-1	4.57	51	MTC-1	4.32	51	DBP-3	4.46
3	54	HA-1	4.37	67	MTC-1	4.39	19	OBP-2	4.23	67	MTC-1	4.56	51	DBP-3	4.29	34	OBP-1	4.45
4	121	OBP-2	4.35	32	HA-2	4.26	20	OBP-2	4.07	6	OBP-2	4.46	137	MTC-1	4.28	51	MTC-1	4.42
5	34	OBP-1	4.35	71	MTC-3	4.25	121	OBP-2	4.05	120	OBP-2	4.43	100	OBP-1	4.27	137	DBP-3	4.39
6	51	MTC-3	4.35	54	HA-2	4.18	22	OBP-2	4.05	40	OBP-2	4.41	120	OBP-2	4.22	32	HA-2	4.39
7	51	MTC-1	4.35	73	HA-1	4.18	54	HA-1	4.05	137	MTC-1	4.39	71	MTC-3	4.21	137	HA-1	4.39
8	51	DBP-3	4.34	65	HA-1	4.14	120	OBP-2	4.04	159	OBP-2	4.38	6	OBP-2	4.20	22	OBP-2	4.38
9	23	OBP-2	4.32	125	OBP-2	4.13	149	MTC-3	4.04	2	OBP-2	4.36	137	DBP-3	4.18	102	OBP-2	4.36
10	137	MTC-1	4.32	89	MTC-1	4.09	149	MTC-2	4.04	29	OBP-1	4.36	159	OBP-2	4.16	51	MTC-3	4.35
11	137	HA-1	4.30	26	MTC-2	4.07	26	MTC-2	4.02	137	DBP-3	4.34	102	OBP-2	4.16	26	MTC-2	4.34
12	152	HA-2	4.26	66	HA-1	4.05	21	OBP-2	4.00	32	HA-2	4.33	51	MTC-3	4.16	138	HA-1	4.32
13	138	HA-1	4.26	64	HA-2	4.04	32	HA-2	4.00	71	MTC-3	4.33	137	MTC-3	4.14	71	MTC-3	4.32
14	138	DBP-2	4.23	2	OBP-2	3.96	51	DBP-3	3.96	51	MTC-1	4.33	121	OBP-2	4.11	137	MTC-1	4.32
15	26	MTC-2	4.23	68	OBP-1	3.91	65	HA-1	3.95	89	MTC-1	4.33	19	OBP-2	4.11	19	OBP-2	4.30
16	137	DBP-3	4.21	113	HA-1	3.91	159	OBP-2	3.91	137	HA-1	4.32	78	OBP-2	4.11	105	HA-1	4.27
17	138	MTC-1	4.21	51	MTC-3	3.91	160	DBP-3	3.91	125	OBP-2	4.29	40	OBP-2	4.11	152	HA-2	4.26
18	137	DBP-2	4.20	137	MTC-1	3.91	64	HA-2	3.91	152	HA-2	4.28	99	OBP-1	4.11	120	OBP-2	4.23
19	6	OBP-2	4.19	152	HA-2	3.82	73	HA-1	3.91	54	HA-1	4.28	105	RA-1	4.11	6	OBP-2	4.23
20	139	HA-2	4.18	51	MTC-1	3.81	51	MTC-3	3.91	138	HA-1	4.28	26	MTC-2	4.11	23	OBP-2	4.23
21	32	HA-2	4.16	138	OBP-2	3.77	2	OBP-2	3.89	51	MTC-3	4.28	138	MTC-1	4.11	138	DBP-3	4.23
22	105	HA-1	4.14	51	DBP-3	3.68	71	MTC-3	3.89	78	OBP-2	4.27	54	HA-1	4.09	139	HA-2	4.21
23	2	OBP-2	4.11	6	OBP-2	3.67	66	HA-1	3.88	138	DBP-3	4.27	137	HA-1	4.09	137	OBP-2	4.20
24	19	OBP-2	4.09	139	HA-2	3.65	161	DBP-3	3.84	51	DBP-3	4.27	138	DBP-3	4.07	20	OBP-2	4.20
25	20	OBP-2	4.09	137	MTC-3	3.65	160	MTC-2	3.84	138	MTC-1	4.25	152	HA-2	4.07	100	OBP-1	4.20
26	157	DBP-3	4.09	78	OBP-2	3.61	23	OBP-2	3.80	102	OBP-2	4.21	138	HA-1	4.05	159	OBP-2	4.18

Firepower			Mobility			Command			Scale			Survivability			Sustainment			Mission Success			
Rank	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean
27	153	HA-2	4.07	153	HA-2	3.61	161	MTC-1	3.80	139	HA-2	4.21	125	OBP-2	4.02	113	HA-1	4.18			
28	138	MTC-3	4.07	140	HA-2	3.61	154	OBP-2	3.79	121	OBP-2	4.20	2	OBP-2	4.02	137	MTC-3	4.16			
29	25	DBP-3	4.05	137	HA-1	3.61	160	MTC-3	3.79	34	OBP-1	4.20	22	OBP-2	4.02	125	OBP-2	4.14			
30	71	MTC-3	4.04	102	OBP-2	3.60	160	HA-2	3.72	137	MTC-3	4.19	137	DBP-2	4.02	2	OBP-2	4.14			
31	154	OBP-2	4.00	137	DBP-3	3.59	125	OBP-2	3.71	105	HA-1	4.18	32	HA-2	4.02	138	MTC-1	4.14			
32	138	DBP-3	3.98	138	HA-1	3.58	105	HA-1	3.71	137	DBP-2	4.16	138	DBP-2	3.98	78	OBP-2	4.11			
33	140	HA-2	3.98	19	OBP-2	3.57	157	DBP-3	3.70	26	MTC-2	4.16	139	HA-2	3.98	138	DBP-2	4.11			
34	138	MTC-3	3.98	105	HA-1	3.52	152	HA-2	3.68	153	HA-2	4.14	20	OBP-2	3.96	67	MTC-1	4.11			
35	21	OBP-1	3.96	138	MTC-3	3.51	67	MTC-1	3.68	19	OBP-2	4.13	34	OBP-1	3.96	99	OBP-1	4.09			
36	85	OBP-2	3.95	149	MTC-2	3.51	153	HA-2	3.67	138	DBP-2	4.13	21	OBP-2	3.93	160	DBP-3	4.09			
37	103	DBP-3	3.91	138	DBP-3	3.50	139	HA-2	3.67	57	OBP-1	4.09	29	OBP-1	3.91	137	DBP-2	4.09			
38	113	HA-1	3.91	160	OBP-1	3.48	51	MTC-1	3.67	140	HA-2	4.09	157	OBP-1	3.91	138	MTC-3	4.05			
39	125	OBP-2	3.88	34	OBP-1	3.46	25	DBP-3	3.66	138	MTC-3	4.09	153	HA-2	3.91	140	HA-2	4.04			
40	64	HA-2	3.88	138	DBP-2	3.46	155	DBP-1	3.66	157	DBP-3	4.05	138	MTC-3	3.91	21	OBP-2	4.02			
41	65	HA-1	3.84	137	DBP-2	3.46	85	OBP-2	3.64	64	HA-2	4.05	154	OBP-2	3.89	153	HA-2	4.02			
42	67	MTC-1	3.80	160	MTC-2	3.46	102	OBP-2	3.64	22	OBP-2	4.04	89	MTC-1	3.89	64	HA-2	4.02			
43	73	HA-1	3.79	161	DBP-3	3.43	137	DBP-3	3.63	20	OBP-2	4.00	160	DBP-3	3.88	160	MTC-2	4.02			
44	100	OBP-1	3.75	149	MTC-3	3.42	140	HA-2	3.58	21	OBP-2	3.96	140	HA-2	3.88	157	DBP-3	3.98			
45	78	OBP-2	3.68	100	OBP-1	3.40	6	OBP-2	3.57	73	HA-1	3.96	64	HA-2	3.81	65	HA-1	3.98			
46	68	OBP-1	3.68	155	DBP-1	3.39	138	HA-1	3.56	25	DBP-3	3.95	85	OBP-2	3.79	154	OBP-2	3.95			
47	160	MTC-3	3.67	160	MTC-3	3.37	137	MTC-1	3.56	23	OBP-2	3.93	161	DBP-3	3.79	161	DBP-3	3.95			
48	119	DBP-3	3.66	161	MTC-1	3.34	138	MTC-3	3.53	154	OBP-2	3.91	25	DBP-3	3.79	40	OBP-2	3.93			
49	149	MTC-2	3.66	157	DBP-3	3.32	137	MTC-3	3.53	65	HA-1	3.89	103	DBP-3	3.76	25	DBP-3	3.93			
50	161	DBP-3	3.64	99	OBP-1	3.26	138	DBP-3	3.52	113	HA-1	3.89	23	OBP-2	3.75	73	HA-1	3.93			
51	66	HA-1	3.61	103	DBP-3	3.24	138	MTC-1	3.49	160	DBP-3	3.88	158	OBP-2	3.73	103	DBP-3	3.91			
52	160	OBP-1	3.57	22	OBP-1	3.21	68	OBP-1	3.48	103	DBP-3	3.85	57	OBP-1	3.70	161	MTC-1	3.89			
53	155	DBP-1	3.57	25	DBP-3	3.21	119	DBP-3	3.48	68	HA-1	3.84	113	HA-1	3.70	68	OBP-1	3.88			
54	99	OBP-1	3.55	160	HA-2	3.18	137	HA-1	3.44	155	DBP-1	3.84	149	MTC-2	3.70	160	MTC-3	3.88			
55	160	MTC-3	3.49	154	OBP-2	3.13	103	DBP-3	3.42	85	OBP-2	3.82	160	MTC-3	3.68	66	HA-1	3.86			
56	120	OBP-2	3.44	23	OBP-2	3.11	138	DBP-2	3.34	161	DBP-3	3.79	149	MTC-3	3.68	85	OBP-2	3.80			
57	149	MTC-3	3.44	20	OBP-2	3.09	137	DBP-2	3.34	66	HA-1	3.74	73	HA-1	3.67	149	MTC-2	3.77			

		Scale																
Firepower		Mobility			Command			Survivability			Sustainment			Mission Success				
Rank	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean	Task ^a	Scenario ^b	Mean
58	161	MTC-1	3.42	21	OBP-2	3.07	34	OBP-1	3.29	158	OBP-2	3.70	160	MTC-2	3.63	149	MTC-3	3.74
59	159	OBP-2	3.36	119	DBP-3	3.04	89	MTC-1	3.28	160	MTC-3	3.63	65	HA-1	3.60	155	DBP-1	3.73
60	89	MTC-1	3.30	121	OBP-2	3.02	57	OBP-1	3.14	149	MTC-2	3.63	119	DBP-3	3.55	89	MTC-1	3.72
61	158	OBP-2	3.25	57	OBP-1	2.96	40	OBP-2	3.13	119	DBP-3	3.61	66	HA-1	3.53	160	HA-2	3.68
62	160	HA-2	3.19	85	OBP-2	2.95	78	OBP-2	3.11	160	MTC-2	3.58	155	DBP-1	3.48	29	OBP-1	3.66
63	40	OBP-2	3.12	158	OBP-2	2.86	100	OBP-1	3.04	149	MTC-3	3.56	161	MTC-1	3.46	158	OBP-2	3.61
64	29	OBP-2	3.12	29	OBP-1	2.86	29	OBP-1	3.00	161	MTC-1	3.37	68	OBP-1	3.45	57	OBP-2	3.59
65	135	DBP-1	2.98	40	OBP-2	2.82	99	OBP-1	2.95	160	HA-2	3.33	160	HA-2	3.28	119	DBP-3	3.50
66	57	OBP-1	2.95	135	DBP-1	2.48	135	DBP-1	2.79	135	DBP-1	3.02	135	DBP-1	2.77	135	DBP-1	2.84

^a Numbers correspond to task numbers in ISD-Based questionnaire. See Appendix C for task titles.

^b DBP-1: Maintain Surveillance in Platoon Sector, Defend Battle Position.
 DBP-2: Initiate Indirect Fires in Platoon Sector, Defend Battle Position.
 DBP-3: Initiate Direct Fires in Platoon Sector, Defend Battle Position.
 HA-1: Conduct Fire and Maneuver, Hasty Attack.
 HA-2: Conduct the Assault, Hasty Attack.
 MTC-1: Immediate Action, Movement to Contact.
 MTC-2: Develop the Situation, Movement to Contact.
 MTC-3: Occupy Suppressive Fire Position, Movement to Contact.
 OBP-1: Occupy Platoon Battle Position, Occupy Battle Position.
 OBP-2: Organize Platoon Battle Position, Occupy Battle Position.